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Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3032	12980	22753	1.16	1.0E-12	AF000991.1	NT	Homo sapiens testis-specific Testis Transcript Y 2 (TTY2) mRNA, partial cds
3798	13710	23496	27.7	1.0E-12	AU132248.1	EST_HUMAN	AU132248 NT2RP3 Homo sapiens cDNA clone NT2RP3004070 5'
3798	13710	23497	27.7	1.0E-12	AU132248.1	EST_HUMAN	AU132248 NT2RP3 Homo sapiens cDNA clone NT2RP3004070 5'
5630	15544		1.73	1.0E-12	U62828.1	NT	Homo sapiens ataxia telangiectasia (ATM) gene, complete cds
5682	15591		1.82	1.0E-12	Q9Y2G7	SWISSPROT	HYPOTHETICAL ZINC FINGER PROTEIN KIAA0961
6224	16090	26240	1.72	1.0E-12	AF196864.1	NT	Homo sapiens putative BPES syndrome breakpoint region protein gene, complete cds
6240	16106	26256	9.11	1.0E-12	AI248533.1	EST_HUMAN	qh66a04.x1 Soares fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:1849614 3' similar to gb:M19503 LINE-1 REVERSE TRANSCRIPTASE HOMOLOG (HUMAN); contains MER10.t1 MER10 repetitive element;
6240	16106	26257	9.11	1.0E-12	AI248533.1	EST_HUMAN	qh66a04.x1 Soares fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:1849614 3' similar to gb:M19503 LINE-1 REVERSE TRANSCRIPTASE HOMOLOG (HUMAN); contains MER10.t1 MER10 repetitive element;
7051	16928	27119	1.31	1.0E-12	AA782323.1	EST_HUMAN	ac26d05.s1 Stratagene ovary (#937217) Homo sapiens cDNA clone IMAGE:857577 3'
9085	18960	29118	3.36	1.0E-12	AW962164.1	EST_HUMAN	EST374237 MAGE resequences, MAGG Homo sapiens cDNA PROBABLE TONB-DEPENDENT RECEPTOR H10712 PRECURSOR
9085	19728		2.2	1.0E-12	P44836	SWISSPROT	M. setulosus mitochondrial 12S rRNA gene
9963	19426		2.72	1.0E-12	X85949.1	NT	Homo sapiens X4 pseudautosomal region; segment 1/2
3575	13489		1.13	9.0E-13	AJ271735.1	NT	Homo sapiens CST gene for cerebroside sulfotransferase, exon 1, 2, 3, 4, 5
3865	13776	23570	1.16	9.0E-13	AB029900.1	NT	zaz26b06.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:293851 3'
7537	17388		2.37	9.0E-13	N69653.1	EST_HUMAN	Homo sapiens prion protein (PrP) gene, complete cds
700	10633	20458	5.05	8.0E-13	U29185.1	NT	Homo sapiens basic transcription factor 2, p44 (btf2p44) gene, partial cds, neuronal apoptosis inhibitory protein (naip) and survival motor neuron protein (smn) genes, complete cds
700	10633	20459	5.05	8.0E-13	U29185.1	NT	Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein (L44L) and F1P3 (F1P3) genes, complete cds
1796	11694	21570	1.36	8.0E-13	U80017.1	NT	Human germline T-cell receptor beta chain TCRBV13S1, TCRBV6S8A2T, TCRBV5S8A3N2T, TCRBV13S6A2T, TCRBV6S9P, TCRBV5S3A2T, TCRBV13S8P, TCRBV6S3A1N1T, TCRBV6S2, TCRBV6S6A2T, TCRBV6S7P, TCRBV13S4, TCRBV6S2A1N1T, TCRBV6S4A2T, TCRBV6S4A1, TCRBV23S1A2T, TCRBV12>
7838	17688		2.13	8.0E-13	U78027.1	NT	601463285F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3865613 5'
8984	18789	28079	2.49	8.0E-13	U66080.1	NT	POLYPEPTIDE N-ACETYL GALACTOSAMINYLTRANSFERASE (PROTEIN-UDP ACETYL GALACTOSAMINYLTRANSFERASE) (UDP-GALNAC:POLYPEPTIDE, N-ACETYL GALACTOSAMINYLTRANSFERASE) (GALNAC-T1)
9550	19149		10.33	7.0E-13	BE778223.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C007
9768	19287		1.33	7.0E-13	Q10473	SWISSPROT	
2054	11944	21840	18.51	6.0E-13	AI163207.2	NT	

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3280	13201		1.05	5.0E-13	R78338.1	EST_HUMAN	y82f04.r1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:145769 5'
3351	13271		1.45	5.0E-13	AA435773.1	EST_HUMAN	z177a12.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:728350 3' similar to contains Alu repetitive element; contains element MER22 repetitive element;
8234	18115	28367	2.75	5.0E-13	P07313	SWISSPROT	MYOSIN LIGHT CHAIN KINASE, SKELETAL MUSCLE (MLCK)
1824	11721		2.96	4.0E-13	AW378614.1	EST_HUMAN	PM2-HT0224-221099-001-e11 HT0224 Homo sapiens cDNA
2411	12288		1.58	4.0E-13	AF003529.1	NT	Homo sapiens glypican 3 (GPC3) gene, partial cds and flanking repeat regions
5430	15350	25404	4.86	4.0E-13	BE169131.1	EST_HUMAN	PM3-HT0520-230200-002-c08 HT0520 Homo sapiens cDNA
6278	16142	26298	1.92	4.0E-13	AB037750.1	NT	Homo sapiens mRNA for KIAA1329 protein, partial cds
6542	16400		1.52	4.0E-13	N44291.1	EST_HUMAN	Yy39g05.r1 Soares melanocyte 2NbHM Homo sapiens cDNA clone IMAGE:273080 5' similar to PIR.A32995 A32995 t complex sterility protein - mouse ;
7757	17607	27831	4.57	4.0E-13	AI289831.1	EST_HUMAN	qn32cd05.x1 NCL_CGAP_Kid5 Homo sapiens cDNA clone IMAGE:189945 3' similar to contains Alu repetitive element;
8507	18379	28645	1.83	4.0E-13	AA435819.1	EST_HUMAN	z178g10.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:728514 3'
8507	18379	28646	1.83	4.0E-13	AA435819.1	EST_HUMAN	z178g10.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:728514 3'
173	10144		3.8	3.0E-13	AF003528.1	NT	Homo sapiens X-linked antihyalitic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
847	10774		1.37	3.0E-13	AA430310.1	EST_HUMAN	zw89g08.r1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:781406 5'
2319	12200	22099	1.25	3.0E-13	AJ271736.1	NT	Homo sapiens Xq pseudautosomal region; segment 2/2
2429	12306		2.63	3.0E-13	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
2629	12497	22397	4.23	3.0E-13	BF372962.1	EST_HUMAN	GM3-FT0100-140700-242-f08 FT0100 Homo sapiens cDNA
3150	13075		2.86	3.0E-13	AA745944.1	EST_HUMAN	ob18402.s1 NCL_CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1324035 3'
6601	15481	26669	5.92	3.0E-13	U52111.2	NT	Homo sapiens X28 region near ALD locus containing dual specificity phosphatase 9 (DUSP9), ribosomal protein L18a (RPL18a), Ca2+/Calmodulin-dependent protein kinase I (CAMKI), creatine transporter (CRTR), CDM protein (CDM), adrenoleukodystrophy protein >
8094	17955		4.03	3.0E-13	AI064788.1	EST_HUMAN	HA0538 Human fetal liver cDNA library Homo sapiens cDNA
8403	18279	28531	3.66	3.0E-13	BE063509.1	EST_HUMAN	GM0-BT0281-031199-087-a03 BT0281 Homo sapiens cDNA
8876	18688	28980	2.6	3.0E-13	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
144	10118	19938	2.77	2.0E-13	U62111.2	NT	Homo sapiens X28 region near ALD locus containing dual specificity phosphatase 9 (DUSP9), ribosomal protein L18a (RPL18a), Ca2+/Calmodulin-dependent protein kinase I (CAMKI), creatine transporter (CRTR), CDM protein (CDM), adrenoleukodystrophy protein >
239	10207	20024	1.31	2.0E-13	U23639.1	NT	Danio rerio fibroblast growth factor receptor 4 mRNA, complete cds
1249	11156	21005	4.71	2.0E-13	AF239710.1	NT	Homo sapiens DNA polymerase delta small subunit (POLD2) gene, exons 1 through 11 and complete cds
3244	13167	22966	1.08	2.0E-13	BF431899.1	EST_HUMAN	hab/6f05.x1 Soares NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE: 3'

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4019	13623		1.72	2.0E-13	AL163278.2	NT	Homo sapiens chromosome 21 segment HS21C07/8
5722	15629	25732	3.87	2.0E-13	Q08852	SWISSPROT	CELL SURFACE GLYCOPROTEIN 1 PRECURSOR (OUTER LAYER PROTEIN B) (S-LAYER PROTEIN 1)
6078	16061	26209	6.32	2.0E-13	X16912.1	NT	Human PFKL gene for liver-type 6-phosphofructokinase (EC 2.7.1.11) exon 2
7976	17626	28057	3.97	2.0E-13	5031896	NT	Homo sapiens mab-21 (C. elegans)-like 1 (MAB21L1) mRNA
9251	18851		7.42	2.0E-13	AW892155.1	EST_HUMAN	CMO-NN0001-100300-274-e11 NN0001 Homo sapiens cDNA
288	10252	20072	1.37	1.0E-13	S74129.1	NT	FGF-1 fibroblast growth factor 1 [human, kidney, Genomic, 342 nt, segment 2 of 2]
870	10796	20646	4.39	1.0E-13	AJ007973.1	NT	Homo sapiens LGMD2B gene
1314	11220	21077	1.27	1.0E-13	X87344.1	NT	H. sapiens DMA, DMB, HLA-Z1, IPP2, LMP2, TAP1, LMP7, TAP2, DOB, DQB2 and RING8, 9, 13 and 14 genes
1976	11869	21761	2.16	1.0E-13	AA720574.1	EST_HUMAN	nw21g02.s1 NCI_CGAP_GCB0 Homo sapiens cDNA clone IMAGE:1241138 3' similar to contains THR.i3
4483	14382	24169	1.48	1.0E-13	BF340387.1	EST_HUMAN	THR repetitive element ;
8684	18572	28855	13.83	1.0E-13	BF108755.1	EST_HUMAN	602038009F1 NCI_CGAP_Brn64 Homo sapiens cDNA clone IMAGE:4185965 5'
9076	18853		1.62	1.0E-13	AV715377.1	EST_HUMAN	745e10.x1 Soares NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3524443 3' similar to contains MER29.b2 MER29 repetitive element ;
9714	19255		1.6	1.0E-13	AJ271735.1	NT	AV715377 DCB Homo sapiens cDNA clone DCBAIE03 5'
330	10289	20105	2.92	9.0E-14	AA781159.1	EST_HUMAN	Homo sapiens Xq pseudautosomal region, segment 1/2
331	10290	20106	2.85	9.0E-14	AA781159.1	EST_HUMAN	aj24c01.s1 Soares_testis_NHT Homo sapiens cDNA clone 1391232 3' similar to contains MER19.t1 MER19 repetitive element ;
2451	12328		4.04	9.0E-14	AW861577.1	EST_HUMAN	aj24c01.s1 Soares_testis_NHT Homo sapiens cDNA clone 1391232 3' similar to contains MER19.t1 MER19 repetitive element ;
2725	12687	22482	4.62	9.0E-14	AB038162.1	NT	RC4-CT0322-080100-013-d09 CT0322 Homo sapiens cDNA
3073	13000	22790	3.74	9.0E-14	AW513296.1	EST_HUMAN	Homo sapiens TFF gene cluster for trefoil factor, complete cds
3200	10289	20105	0.98	9.0E-14	AA781159.1	EST_HUMAN	xs54h05.x1 NCI_CGAP_Ur1 Homo sapiens cDNA clone IMAGE:2707833 3'
3728	13640	23426	5.22	9.0E-14	D14547.1	NT	aj24c01.s1 Soares_testis_NHT Homo sapiens cDNA clone 1391232 3' similar to contains MER19.t1 MER19 repetitive element ;
4650	14536	24325	1.93	9.0E-14	AJ002153.1	NT	Human DNA, SINE repetitive element
3453	13369		1.57	8.0E-14	BE468263.1	EST_HUMAN	Saginus oedipus gene for seminal vesicle secreted protein semenogelin I
3672	13763		2.77	8.0E-14	R76269.1	EST_HUMAN	h271c09.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3213424 3'
7434	16447	26937	60.69	8.0E-14	X89211.1	NT	y72e03.r1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:144796 3'
7516	17303	27510	3.49	8.0E-14	AA219316.1	EST_HUMAN	H. sapiens DNA for endogenous retroviral like element
8732	15588		4.39	8.0E-14	BE062558.1	EST_HUMAN	zq17c10.s1 Strategene fetal retina 937202 Homo sapiens cDNA clone IMAGE:629970 3'
							QV2-BT0258-261099-014-a01 BT0258 Homo sapiens cDNA

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1611	12699		3.07	7.0E-14	AW151673.1	EST_HUMAN	x67e10.x1 NCI_CGAP_Gac4 Homo sapiens cDNA clone IMAGE:2623146 3' similar to contains MER10.12 MER10 repetitive element;
363	10319	20140	10.2	6.0E-14	AF020503.1	NT	Homo sapiens FRA3B common fragile region, diadenosine triphosphate hydrolase (FHT) gene, exon 5
5114	14982	24753	1.02	6.0E-14	8923548	NT	Homo sapiens hypothetical protein FLJ20585 (FLJ20585), mRNA
5114	14982	24757	1.02	6.0E-14	8923548	NT	Homo sapiens hypothetical protein FLJ20585 (FLJ20585), mRNA
7652	17502	27725	2.56	6.0E-14	AF020503.1	NT	Homo sapiens FRA3B common fragile region, diadenosine triphosphate hydrolase (FHT) gene, exon 5
7652	17502	27726	2.56	6.0E-14	AF020503.1	NT	Homo sapiens FRA3B common fragile region, diadenosine triphosphate hydrolase (FHT) gene, exon 5
602	10538	20348	3.92	5.0E-14	Q63120	SWISSPROT	CANALICULAR MULTISPECIFIC ORGANIC ANION TRANSPORTER 1 (MULTIDRUG RESISTANCE- ASSOCIATED PROTEIN 2) (CANALICULAR MULTIDRUG RESISTANCE PROTEIN)
4985	14860	24628	1.09	5.0E-14	AW073791.1	EST_HUMAN	x603b05.x1 NCI_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2575185 3' similar to contains L1.12 L1 repetitive element;
5397	15315	25353	5.12	5.0E-14	P08547	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
1107	12685		1.77	4.0E-14	P04928	SWISSPROT	S-ANTIGEN PROTEIN PRECURSOR
1835	17732	21808	6.5	4.0E-14	AJ007973.1	NT	Homo sapiens LGMD2B gene
3693	13607		0.94	4.0E-14	AA046502.1	EST_HUMAN	z667a06.r1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:487858 5'
4194	14094	23873	1	4.0E-14	N46328.1	EST_HUMAN	W73c12.s1 Soares_multiple_sclerosis_2NbHMP Homo sapiens cDNA clone IMAGE:279190 3' similar to contains L1.13 L1 repetitive element;
9777	19760		2.31	4.0E-14	AI886224.1	EST_HUMAN	wm08c03.x1 NCI_CGAP_Uk4 Homo sapiens cDNA clone IMAGE:2435332 3' similar to contains Alu repetitive element;
934	10859	20705	2.13	3.0E-14	X95466.1	NT	R.norvegicus mRNA for CPG2 protein
4841	14722	24505	0.82	3.0E-14	AW265354.1	EST_HUMAN	xp45f12.x1 NCI_CGAP_HN11 Homo sapiens cDNA clone IMAGE:2743343 3' similar to contains Alu repetitive element; contains element MER9 repetitive element;
4844	14725	24507	1.1	3.0E-14	7656864	NT	Homo sapiens a disintegrin and metalloproteinase domain 29 (ADAM29), mRNA
5104	14972		1.23	3.0E-14	BE466372.1	EST_HUMAN	hx94f11.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3195501 3' similar to contains MER4.b2 repetitive element;
5157	15024	24791	1.5	3.0E-14	P02894	SWISSPROT	CIRCUMSPOROZOITE PROTEIN PRECURSOR (CS)
8563	14722	24505	7.59	3.0E-14	AW265354.1	EST_HUMAN	xp45f12.x1 NCI_CGAP_HN11 Homo sapiens cDNA clone IMAGE:2743343 3' similar to contains Alu repetitive element; contains element MER9 repetitive element;
384	10331	20154	3.98	2.0E-14	AJ271736.1	NT	Homo sapiens Xq pseudautosomal region; segment 2/2
384	10331	20155	3.98	2.0E-14	AJ271736.1	NT	Homo sapiens Xq pseudautosomal region; segment 2/2
675	12673	20428	6.35	2.0E-14	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103

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2339	12219		1.36	2.0E-14	AW372888.1	EST_HUMAN	RC5-BT0377-091299-031-D12 BT0377 Homo sapiens cDNA
2416	12293		1.09	2.0E-14	7557529	NT	Homo sapiens rhabdoid tumor deletion region protein 1 (RTDR1), mRNA
2479	12355	22246	1.24	2.0E-14	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
2640	12507		0.95	2.0E-14	P08548	SWISSPROT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
5505	15423	25185	2.96	2.0E-14	U01317.1	NT	Human beta globin region on chromosome 11
6114	18008		2.18	2.0E-14	BE000550.1	EST_HUMAN	RC3-BN0072-240200-011-a06 BN0072 Homo sapiens cDNA
6432	16293	26454	19.91	2.0E-14	BE158761.1	EST_HUMAN	IL2-HT0397-071299-024-D04 HT0397 Homo sapiens cDNA
6432	16293	26455	19.91	2.0E-14	BE158761.1	EST_HUMAN	IL2-HT0397-071299-024-D04 HT0397 Homo sapiens cDNA
8160	18048	28300	4.76	2.0E-14	AW139800.1	EST_HUMAN	UI-H-BI1-adw-a-10-Q-JL:s1 NCI CGAP Sub3 Homo sapiens cDNA clone IMAGE:2718234 3'
8791	15423	25485	1.81	2.0E-14	U01317.1	NT	Human beta globin region on chromosome 11
1051	10968	20810	1.31	1.0E-14	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
1384	11289	21143	7.67	1.0E-14	AL163268.2	NT	Homo sapiens chromosome 21 segment HS21C068
1384	11289	21144	7.67	1.0E-14	AL163268.2	NT	Homo sapiens chromosome 21 segment HS21C068
1956	11851	21738	21.54	1.0E-14	L44140.1	NT	Homo sapiens chromosome X region from filamin (FLN) gene to glucose-6-phosphate dehydrogenase (G6PD) gene, complete cds
2137	12025	21921	6.17	1.0E-14	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
2358	12238	22134	6.43	1.0E-14	AF001989.1	NT	Homo sapiens ribosomal protein L23A (RPL23A) gene, complete cds
2914	12841	22841	1.38	1.0E-14	P05227	SWISSPROT	HISTIDINE-RICH PROTEIN PRECURSOR (CLONE PHRP-II)
3130	13055	22854	4.67	1.0E-14	BF335227.1	EST_HUMAN	RC2-CT0432-310700-013-a09_1 CT0432 Homo sapiens cDNA
3130	13055	22855	4.67	1.0E-14	BF335227.1	EST_HUMAN	RC2-CT0432-310700-013-a09_1 CT0432 Homo sapiens cDNA
3811	13723	23512	2	1.0E-14	AA682994.1	EST_HUMAN	ae89c12.s1 Striatogene schizo brain S11 Homo sapiens cDNA clone IMAGE:971350 3'
4374	14270	24051	1.74	1.0E-14	AW275832.1	EST_HUMAN	xq39h10.x1 NCI CGAP Lu28 Homo sapiens cDNA clone IMAGE:2753059 3'
5550	15466	25536	1.97	1.0E-14	AF126145.1	NT	Bos taurus xenobiotic/medium-chain fatty acid:CoA ligase form XL-III mRNA, nuclear mRNA encoding mitochondrial protein, complete cds
6012	19457	26045	10.41	1.0E-14	11437150	NT	Homo sapiens promitin (mouse)-like 1 (PROML1), mRNA
6012	19457	26046	10.41	1.0E-14	11437150	NT	Homo sapiens promitin (mouse)-like 1 (PROML1), mRNA
1558	11463	21320	2.85	9.0E-15	7427522	NT	Homo sapiens promitin (mouse)-like 1 (PROML1), mRNA
2126	12014		1.64	9.0E-15	AF196779.1	NT	Homo sapiens protein tyrosine phosphatase, receptor type, T (PTPRT), mRNA
6427	16288	26449	4.28	9.0E-15	P21416	SWISSPROT	Homo sapiens transcription factor IGIM enhancer 3, JM11 protein, JM4 protein, JM5 protein, T54 protein, JM10 protein, A4 differentiation-dependent protein, triple LIM domain protein 6, and synaptophysin genes, complete cds; and L-type calcium channel α_2
6673	16553	26748	1.53	9.0E-15	BE903558.1	EST_HUMAN	GAG POLYPROTEIN [CONTAINS: CORE PROTEINS P15, P12, P30, P10]
2780	10415		1	8.0E-15	BE261482.1	EST_HUMAN	601148632F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3960156 5'

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7963	17813		2.83	7.0E-15	AW241958.1	EST_HUMAN	xt77d02.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2700483 3' similar to contains THR.12 THR repetitive element;
978	10901	20748	6.12	6.0E-15	AJ271736.1	NT	Homo sapiens Xq pseudautosomal region; segment 2/2
8622	18770		1.86	6.0E-15	AW836843.1	EST_HUMAN	QV1-LT0036-150200-070-c10 L T0036 Homo sapiens cDNA
9848	19415		1.57	6.0E-15	BF432200.1	EST_HUMAN	hab81c12.x1 Soares_NSF_F8_gw_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE: 3'
404	10350	20177	5.79	5.0E-15	AL163208.2	NT	Homo sapiens chromosome 21 segment HS21C008
2733	12595	22490	1.38	5.0E-15	U91328.1	NT	Human hereditary haemochromatosis region, histone 2A-like protein gene, hereditary haemochromatosis (HLA-H) gene, RoRet gene, and sodium phosphate transporter (NP73) gene, complete cds
3423	13340		1	5.0E-15	AW296817.1	EST_HUMAN	U1-H-BW0-ajp-g-10-0-U1.s1 NCI_CGAP_Sub66 Homo sapiens cDNA clone IMAGE:2731219 3'
8063	17954		2.22	5.0E-15	AV730059.1	EST_HUMAN	AV730058 HTF Homo sapiens cDNA clone HTFAVE06 5'
421	9988	19779	2.6	4.0E-15	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
4039	13942	23720	0.78	4.0E-15	AL118596.1	EST_HUMAN	DKFZp761C0810_r1 761 (synonym: hamy2) Homo sapiens cDNA clone DKFZp761C0810 5'
8414	16438	26623	2.38	4.0E-15	AJ130894.1	NT	Homo sapiens mRNA for transcription factor
8414	16438	26624	2.38	4.0E-15	AJ130894.1	NT	Homo sapiens mRNA for transcription factor
4123	14023		5.93	3.0E-15	N89452.1	EST_HUMAN	LY1142F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA clone LY1142 5' similar to ANF(CARDIODILATIN)
4843	14724		1.41	3.0E-15	P92485	SWISSPROT	NADH-UBIQUINONE OXIDOREDUCTASE CHAIN 5
4955	14832	24599	0.88	3.0E-15	AA078097.1	EST_HUMAN	7P01F03 Chromosome 7 Placental cDNA Library Homo sapiens cDNA clone 7P01F03
4955	14832	24900	0.88	3.0E-15	AA078097.1	EST_HUMAN	7P01F03 Chromosome 7 Placental cDNA Library Homo sapiens cDNA clone 7P01F03
6314	16177	26335	2.86	3.0E-15	M27685.1	NT	Mus musculus ultra high sulfur keratin gene, complete cds
6314	16177	26336	2.86	3.0E-15	M27685.1	NT	Mus musculus ultra high sulfur keratin gene, complete cds
7709	17559		1.87	3.0E-15	AA807128.1	EST_HUMAN	cc36a07.s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1351784 3' similar to contains MER19.1
8173	18061	28311					MER19 repetitive element;
							Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
250	10216	20033	3.29	2.0E-15	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
364	10320	20141	3.23	2.0E-15	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
364	10320	20142	3.23	2.0E-15	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
1512	11417		1.14	2.0E-15	8923201	NT	Homo sapiens hypothetical protein FLJ20212 (FLJ20212), mRNA

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Table 4
Single Exon Probes Expressed in Heart

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3465	13381	23186	1.04	2.0E-15	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
3465	13381	23187	1.04	2.0E-15	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
4522	14415		2.07	2.0E-15	AI806335.1	EST_HUMAN	wf07f06.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2349923 3' similar to TR:Q61043
5097	14966	24741	1.33	2.0E-15	P13993	SWISSPROT	Q61043 NINEIN. ;
5097	14966	24742	1.33	2.0E-15	P13993	SWISSPROT	REPETITIVE PROLINE-RICH CELL WALL PROTEIN 2 PRECURSOR
6223	16089		1.71	2.0E-15	AJ400877.1	NT	REPETITIVE PROLINE-RICH CELL WALL PROTEIN 2 PRECURSOR
6310	16173	26331	2.2	2.0E-15	AA704195.1	EST_HUMAN	Homo sapiens ASCL3 gene, CEGP1 gene, C11orf14 gene, C11orf15 gene, C11orf16 gene and C11orf17 gene
6375	16237	26397	5.13	2.0E-15	W05064.1	EST_HUMAN	zj77e03.s1 Soares_fetal_liver_spleen_1NLS_S1 Homo sapiens cDNA clone IMAGE:460924 3'
7410	17277	27484	1.26	2.0E-15	AW379465.1	EST_HUMAN	za76d10.11 Soares_fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:298675 5' similar to WP:F44F4.8 CE02227 TRANSPOSASE ;
7410	17277	27485	1.26	2.0E-15	AW379465.1	EST_HUMAN	Human DNA, SINE repetitive element
8212	18096		3.01	2.0E-15	AJ271735.1	NT	CMO-HT0244-201099-078-at12 HT0244 Homo sapiens cDNA
9799	13381	23186	2.22	2.0E-15	AF223391.1	NT	CMO-HT0244-201099-078-at12 HT0244 Homo sapiens cDNA
9799	13381	23187	2.22	2.0E-15	AF223391.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
2747	12809		1.84	1.0E-15	AI689984.1	EST_HUMAN	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
2979	12906	22706	0.8	1.0E-15	BE043584.1	EST_HUMAN	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
3103	13029	22825	0.99	1.0E-15	P08547	SWISSPROT	h440e02.y1 NCL_CGAP_Ov34 Homo sapiens cDNA clone IMAGE:2969162 5'
4282	14161	23039	0.8	1.0E-15	BE182696.1	EST_HUMAN	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
5096	14956	24731	1.15	1.0E-15	AI984928.1	EST_HUMAN	RC3-H10649-100500-022-005 H10649 Homo sapiens cDNA
5844	15750	25864	1.83	1.0E-15	T95763.1	EST_HUMAN	wf86e04.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2494590 3'
6182	16068		1.96	1.0E-15	BE074217.1	EST_HUMAN	ye40e10.s1 Soares_fetal_liver_spleen_1NLS Homo sapiens cDNA clone IMAGE:120294 3' similar to contains MER6 repetitive element ;
6791	16670	26862	1.28	1.0E-15	AL163280.2	NT	QV3-BT0569-270100-074-g05 BT0569 Homo sapiens cDNA
6905	16783	26976	4.57	1.0E-15	AI200976.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C080
6905	16783	26977	4.57	1.0E-15	AI200976.1	EST_HUMAN	qf69h05.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1755227 3'
7227	17104	27293	1.44	1.0E-15	4507208	NT	qf69h05.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1755227 3'
							Homo sapiens spermidine synthase (SRM) mRNA

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Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8163	18079	28331	6.81	1.0E-15	AF044083.1	NT	Homo sapiens major histocompatibility locus class III region
9867	19492	25131	3.71	1.0E-15	A1783944.1	EST_HUMAN	tr31c05.x1 NCI_CGAP_Ov23 Homo sapiens cDNA clone IMAGE:2219912 3' similar to contains Alu repetitive element;
4404	14298	24082	1.03	9.0E-16	4503168	NT	Homo sapiens cut (Drosophila)-like 1 (CCAAT displacement protein) (CUTL1) mRNA
8361	18238	28486	2.6	9.0E-16	F08688.1	EST_HUMAN	HSC23F051 normalized infant brain cDNA Homo sapiens cDNA clone c-23f05
6343	18206	26368	1.5	7.0E-16	O88807	SWISSPROT	PROTEIN-ARGININE DEIMINASE TYPE IV (PEPTIDYLARGININE DEIMINASE IV) (PAD-R4) (PEPTIDYLARGININE DEIMINASE TYPE ALPHA)
6343	18206	26369	1.5	7.0E-16	O88807	SWISSPROT	PROTEIN-ARGININE DEIMINASE TYPE IV (PEPTIDYLARGININE DEIMINASE IV) (PAD-R4)
9816	19585		6.8	7.0E-16	T94149.1	EST_HUMAN	(PEPTIDYLARGININE DEIMINASE TYPE ALPHA)
2094	11983		8.32	6.0E-16	AW972611.1	EST_HUMAN	ye28c12.11 Stratagene lung (#937210) Homo sapiens cDNA clone IMAGE:119062 5'
1477	11382	21246	1.09	5.0E-16	AJ251154.1	NT	EST384702 IMAGE resequences. MAGL Homo sapiens cDNA
2647	12514	22404	1.79	5.0E-16	AA992176.1	EST_HUMAN	Mus musculus olfactory receptor cluster, OR37A, OR37B, OR37C, OR37E genes and OR37D pseudogene
7784	17634	27867	1.69	5.0E-16	AL163246.2	NT	o80c04.s1 Soares total Tetus Nb2Hf8_9w Homo sapiens cDNA clone IMAGE:1623078 3' similar to contains element L1 repetitive element;
8809	18923	28914	3.33	5.0E-16	BF217968.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C046
9904	19381		8.34	5.0E-16	11418127	NT	601885734F1 NIH MGC_57 Homo sapiens cDNA clone IMAGE:4104129 5'
2192	12079		1.27	4.0E-16	AB001523.1	NT	Homo sapiens GTP binding protein 1 (GTPBP1), mRNA
2328	12209	22107	1.32	4.0E-16	AW797168.1	EST_HUMAN	Homo sapiens gene for TMEM1 and PWP2, complete and partial cds
2328	12209	22108	1.32	4.0E-16	AW797168.1	EST_HUMAN	QV1-UM0036-200300-115-g02 UM0036 Homo sapiens cDNA
3411	13328	23129	3.85	4.0E-16	Q16653	SWISSPROT	QV1-UM0036-200300-115-g02 UM0036 Homo sapiens cDNA
4050	13952	23728	3.55	4.0E-16	BE083875.1	EST_HUMAN	MYELIN-OLIGODENDROCYTE GLYCOPROTEIN PRECURSOR
4050	13952	23729	3.55	4.0E-16	BE083875.1	EST_HUMAN	PM4-BT0650-010400-002-g09 BT0650 Homo sapiens cDNA
5092	14962	24737	1	4.0E-16	P08548	SWISSPROT	PM4-BT0650-010400-002-g09 BT0650 Homo sapiens cDNA
5538	18306	26575	33.8	4.0E-16	AL163284.2	NT	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
7358	17226	27425	1.22	4.0E-16	11423191	NT	Homo sapiens chromosome 21 segment HS21C084
8551	18421	28691	1.74	4.0E-16	AV730030.1	EST_HUMAN	Homo sapiens hypothetical protein FLJ10024 (FLJ10024), mRNA
9156	18906		1.64	4.0E-16	P08548	SWISSPROT	AV730030 HTF Homo sapiens cDNA clone HTFAWA03 5'
9244	18957		5.94	4.0E-16	C05947.1	EST_HUMAN	LINE-1 REVERSE TRANSCRIPTASE HOMOLOG
9255	18964	25319	2.04	4.0E-16	6912459	NT	C05947 Human pancreatic islet Homo sapiens cDNA clone hbc5365
128	10102	19924	1.59	3.0E-16	AW022862.1	EST_HUMAN	Homo sapiens G1b2-associated binder 2 (KIAA0571), mRNA
128	10102	19925	1.59	3.0E-16	AW022862.1	EST_HUMAN	df45c01.y1 Morton Fetal Cochlea Homo sapiens cDNA clone IMAGE:2486376 5'
458	10402		1.47	3.0E-16	AL046445.1	EST_HUMAN	df45c01.y1 Morton Fetal Cochlea Homo sapiens cDNA clone IMAGE:2486376 5'
							DKFZp434P037_r1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434P037 5'

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
467	10410		1.6	3.0E-16	AF135448.1	NT	Homo sapiens TSX (TSX) pseudogene, exon 5
1436	11341	21207	2.01	3.0E-16	Q28983	SWISSPROT	ZONADHESIN PRECURSOR
2946	12873	22670	4.05	3.0E-16	P03200	SWISSPROT	ENVELOPE GLYCOPROTEIN GP340 (MEMBRANE ANTIGEN) (MA) [CONTAINS: GLYCOPROTEIN GP220]
3874	13785		8.18	3.0E-16	AF020503.1	NT	Homo sapiens FRA3B common fragile region, diadenosine triphosphate hydrolase (FHIT) gene, exon 5
3875	13786		0.99	3.0E-16	U03887.1	NT	Human BXP20 gene
4861	14741	24521	1.01	3.0E-16	AV661393.1	EST_HUMAN	AV661393 GLC Homo sapiens cDNA clone GLGSA01 3'
5452	15373	25431	1.41	3.0E-16	AF003529.1	NT	Homo sapiens glypican 3 (GPC3) gene, partial cds and flanking repeat regions
7031	16908	27098	4.72	3.0E-16	A1002836.1	EST_HUMAN	am8h05.s1 Stratagene schizo brain S11 Homo sapiens cDNA clone IMAGE:1684185 3' similar to contains THR.52 THR repetitive element;
7691	17541		1.27	3.0E-16	BF690617.1	EST_HUMAN	60224638F1 NiH_MGC_62 Homo sapiens cDNA clone IMAGE:4332032 5'
7828	17678	27922	3.08	3.0E-16	L78810.1	NT	Homo sapiens ADPI/ATP carrier protein (ANT-2) gene, complete cds
956	10880		1.18	2.0E-16	AL163279.2	NT	Homo sapiens chromosome 21 segment HS21C079
2337	12217		0.96	2.0E-16	AA621761.1	EST_HUMAN	af06d04.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1030855 3'
2657	12524		1.71	2.0E-16	J03081.1	NT	Human SSAN-related endogenous retroviral LTR-like element
4087	13987	23764	1.33	2.0E-16	X89211.1	NT	H.sapiens DNA for endogenous retroviral like element
6646	15526	26720	1.63	2.0E-16	A1732837.1	EST_HUMAN	n247f06.x5 NCI CGAP_P112 Homo sapiens cDNA clone IMAGE:1290947 similar to TR:O54849 O54849 HYPOTHETICAL 42.9 KD PROTEIN. [2] TR:O08905 contains MER7.11 MER7 repetitive element;
178	10149	19963	2.55	1.0E-16	AF200719.1	NT	Homo sapiens pituitary tumor transforming gene protein (PTTG) gene, complete cds
377	10361		22.41	1.0E-16	AA628592.1	EST_HUMAN	af39g11.s1 Soares_total_Tetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:1034084 3' similar to contains OFR.12 OFR repetitive element;
1828	11823	21704	2.44	1.0E-16	BF327942.1	EST_HUMAN	QV0-BN0148-070700-293-a10 BN0148 Homo sapiens cDNA
5877	15783		23.72	1.0E-16	U45983.1	NT	Homo sapiens COR8 chemokine receptor (CMKBR8) gene, complete cds
5960	15965	25987	2.81	1.0E-16	Q02779	SWISSPROT	MITOGEN-ACTIVATED PROTEIN KINASE KINASE 10 (MIXED LINEAGE KINASE 2) (PROTEIN KINASE MST)
6458	15783		6.59	1.0E-16	U45983.1	NT	Homo sapiens COR8 chemokine receptor (CMKBR8) gene, complete cds
7349	17217	27416	1.31	1.0E-16	AW875651.1	EST_HUMAN	QV2-PT0012-040400-124-e05 PT0012 Homo sapiens cDNA
3679	13593	23379	2.54	9.0E-17	AW900048.1	EST_HUMAN	CM1-NIN1003-200300-153-e01 NN1003 Homo sapiens cDNA
5035	15938		2.02	9.0E-17	A1392964.1	EST_HUMAN	ig22c11.x1 NCI CGAP_CLL1 Homo sapiens cDNA clone IMAGE:2109524 3' similar to contains MER28.12 MER28 repetitive element;
6720	16900		4.87	9.0E-17	AW150257.1	EST_HUMAN	xq49g12.x1 NCI CGAP_Ut1 Homo sapiens cDNA clone IMAGE:2630980 3' similar to contains OFR.12 OFR repetitive element;

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7870	17720		2.18	9.0E-17	AF200719.1	NT	Homo sapiens pituitary tumor transforming gene protein (PTTG) gene, complete cds
1001	10819		1.7	8.0E-17	AW880701.1	EST_HUMAN	QV0-OT0032-080300-155-d01 OT0032 Homo sapiens cDNA
3817	13729		0.87	8.0E-17	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
5427	19444	25402	3.56	8.0E-17	BE172081.1	EST_HUMAN	MRO-HT0559-080300-003-e04 HT0559 Homo sapiens cDNA
6311	16174		1.36	8.0E-17	AV730759.1	EST_HUMAN	AV730759 HTF Homo sapiens cDNA clone HTFAQB07 5'
1442	11347		3.18	7.0E-17	6753097	NT	Mus musculus apolipoprotein B editing complex 2 (ApoBec2), mRNA
5262	15184		3.05	7.0E-17	AF216650.1	NT	Homo sapiens putative MTAP (MTAP) mRNA, partial cds, alternatively spliced
6017	15921	26052	6.83	7.0E-17	AF229843.1	NT	Mus musculus WNT-2 gene, partial cds; putative ankyrin-related protein and cystic fibrosis transmembrane conductance regulator (CFTR) genes, section 1 of 2 of the complete cds; and unknown gene
198	10168	19986	4.78	6.0E-17	AW963880.1	EST_HUMAN	RC1-HN0003-220300-021-b04 HN0003 Homo sapiens cDNA
5812	15717	25830	1.61	6.0E-17	AW682772.1	EST_HUMAN	h181d04.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2978695 3' similar to contains L1.12
415	9982	19773	2.31	5.0E-17	T64110.1	EST_HUMAN	L1 repetitive element;
6476	16335	26502	2.07	5.0E-17	T81043.1	EST_HUMAN	yc08h08.r1 Stratagene lung (#937210) Homo sapiens cDNA clone IMAGE:79839 5'
8783	18598	28887	2.12	4.0E-17	AL163247.2	NT	yd28b04.r1 Soares fetal liver spleen 1N1LS Homo sapiens cDNA clone IMAGE:109327 5'
9171	18914		1.98	4.0E-17	AJ073546.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C047
2051	11941	21836	1.35	3.0E-17	AW119123.1	EST_HUMAN	ov45a04.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1640286 3' similar to TR:Q16530
3157	13082		1.31	3.0E-17	P35410	SWISSPROT	Q16530 PMS3 mRNA; contains MER10.12 MER10 repetitive element;
3580	13504	23293	1.14	3.0E-17	BE326522.1	EST_HUMAN	xd88c09.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2604784 3'
3590	13504	23294	1.14	3.0E-17	BE326522.1	EST_HUMAN	MAS-RELATED G PROTEIN-COUPLED RECEPTOR MRG
							hw05b04.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3181999 3'
							hw05b04.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3181999 3'
							Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
7594	17445	27660	4.72	3.0E-17	AB026898.1	NT	Homo sapiens SEC14 (S. cerevisiae)-like 2 (SEC14L2), mRNA
9134	18890		3.16	3.0E-17	11417966	NT	AV720204 GLC Homo sapiens cDNA clone GLCIDI08 5'
9909	19386		15.82	3.0E-17	AV720204.1	EST_HUMAN	qt63a06.x1 NCI_CGAP_Eso2 Homo sapiens cDNA clone IMAGE:1969922 3' similar to contains Alu repetitive element;
350	10309	20127	2.81	2.0E-17	AJ270080.1	EST_HUMAN	qt63a06.x1 NCI_CGAP_Eso2 Homo sapiens cDNA clone IMAGE:1969922 3' similar to contains Alu repetitive element;
351	10309	20127	2	2.0E-17	AJ270080.1	EST_HUMAN	z381d04.s1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:399761 3'
972	10896		1.27	2.0E-17	AA722932.1	EST_HUMAN	ZONADHESIN PRECURSOR
2397	12275	22170	2.6	2.0E-17	Q28983	SWISSPROT	ZONADHESIN PRECURSOR
2307	12275	22171	2.6	2.0E-17	Q28983	SWISSPROT	ZONADHESIN PRECURSOR

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2899	12826	22621	5.62	2.0E-17	P12036	SWISSPROT	NEUROFILAMENT TRIPLET H PROTEIN (200 KDA NEUROFILAMENT PROTEIN) (NEUROFILAMENT HEAVY POLYPEPTIDE) (NF-H)
5295	15216	25017	1.95	2.0E-17	M27685.1	NT	Mus musculus ultra high sulfur keratin gene, complete cds
5295	15216	25018	1.95	2.0E-17	M27685.1	NT	Mus musculus ultra high sulfur keratin gene, complete cds
5790	15696		2.07	2.0E-17	AF055066.1	NT	Homo sapiens MHC class 1 region
6711	16591	26779	1.44	2.0E-17	Q95166	SWISSPROT	OLFACTORY RECEPTOR-LIKE PROTEIN OLF3
6925	16803	26997	1.38	2.0E-17	AA300640.1	EST_HUMAN	EST13504 Testis tumor Homo sapiens cDNA 5' and similar to glycogenin
7699	17549	27772	2.72	2.0E-17	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
7699	17549	27773	2.72	2.0E-17	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
7887	17737	27981	5.3	2.0E-17	D13391.1	NT	Human CYP19 gene for aromatase cytochrome P-450, promoter region (containing two cis-acting transcriptional regulatory elements)
733	10685	20499	3.37	1.0E-17	P08183	SWISSPROT	MULTIDRUG RESISTANCE PROTEIN 1 (P-GLYCOPROTEIN 1)
1729	11630	21499	2.45	1.0E-17	AL163207.2	NT	Homo sapiens chromosome 21 segment HS21C007
2069	11959	21853	1.68	1.0E-17	P02461	SWISSPROT	COLLAGEN ALPHA 1(III) CHAIN PRECURSOR
2287	12170	22067	1.46	1.0E-17	U79410.1	NT	Homo sapiens thrombospondin 2 (THBS2) gene, promoter region and exons 1A and 1B
3519	13435		1.01	1.0E-17	AF224669.1	NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
4045	13947		7.17	1.0E-17	R09942.1	EST_HUMAN	yf30e07.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:128388 5'
5885	15792		4.7	1.0E-17	AW468468.1	EST_HUMAN	he38e05.x1 NCI_CGAP_CML1 Homo sapiens cDNA clone IMAGE:2921312 3' similar to contains Alu repetitive element/contains LTR8.t1 LTR8 repetitive element ;
6006	15911	26037	1.44	1.0E-17	A185642.1	EST_HUMAN	qe65b05.x1 Soares_fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:1743825 3'
6006	15911	26038	1.44	1.0E-17	A185642.1	EST_HUMAN	qe65b05.x1 Soares_fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:1743825 3'
6216	16082	26232	1.32	1.0E-17	Q16831	SWISSPROT	URIDINE PHOSPHORYLASE (UDRPASE)
8719	18536	28821	2.01	1.0E-17	Q28824	SWISSPROT	MYOSIN LIGHT CHAIN KINASE, SMOOTH MUSCLE (MLCK) [CONTAINS: TELOKIN]
2422	12299	22196	0.96	9.0E-18	AA174078.1	EST_HUMAN	zp18g12.s1 Stralagene fetal retina 937202 Homo sapiens cDNA clone IMAGE:609862 3'
7468	17328		3.26	9.0E-18	A1472167.1	EST_HUMAN	ig86d03.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:2148389 3'
3718	13630	23415	1.75	8.0E-18	4758977	NT	Homo sapiens protein tyrosine phosphatase, non-receptor type substrate 1 (PTPNS1) mRNA
346	10305	20121	8.39	7.0E-18	AW316976.1	EST_HUMAN	xx10b04.x1 NCI_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2837071 3' similar to gb:U20868 60S
346	10305	20122	8.39	7.0E-18	AW316976.1	EST_HUMAN	xx10b04.x1 NCI_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2837071 3' similar to gb:U20868 60S
5136	15003	24774	0.85	7.0E-18	R16220.1	EST_HUMAN	RIBOSOMAL PROTEIN L4 (HUMAN); ye49c07.s1 Soares infant brain 1NIB Homo sapiens cDNA clone IMAGE:53285 3' similar to contains L1 repetitive element ;

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Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9638	10305	20121	5.73	7.0E-18	AW316976.1	EST_HUMAN	xx1004.x1 NCL_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2837071 3' similar to gb:L20868 60S RIBOSOMAL PROTEIN L4 (HUMAN);
9638	10305	20122	5.73	7.0E-18	AW316976.1	EST_HUMAN	xx1004.x1 NCL_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2837071 3' similar to gb:L20868 60S RIBOSOMAL PROTEIN L4 (HUMAN);
3255	13178	22976	1.16	6.0E-18	X71791.2	NT	Rattus norvegicus partial Gdh/Pn-1 gene for glia-derived nexin/protease nexin I, enhancer region
4641	14529		3.37	6.0E-18	P52181	SWISSPROT	PROTEIN-GLUTAMINE GAMMA-GLUTAMYL TRANSFERASE (TISSUE TRANSGLUTAMINASE) (TGase C) (TGC)
6799	16678		2.69	6.0E-18	11428155	NT	Homo sapiens similar to high-mobility group (nonhistone chromosomal) protein 4 (H. sapiens) (LOC83446), mRNA
8476	18349	28614	1.75	6.0E-18	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
8642	18506	28784	1.78	6.0E-18	X87344.1	NT	H. sapiens DMA, DMB, HLA-Z1, IPP2, LMP2, TAP1, LMP7, TAP2, DOB, DQB2 and RING8, 9, 13 and 14 genes
9394	19052	25308	3.66	6.0E-18	U87929.1	NT	Human aconitate hydratase (ACO2) gene, exon 4
1130	11044	20886	14.74	5.0E-18	A1280214.1	EST_HUMAN	qm65g11.x1 Soares_placenta_8to9weeks_2NblP8t9W Homo sapiens cDNA clone IMAGE:1893668 3' similar to contains Alu repetitive element;
4217	14115	23893	0.92	5.0E-18	10946665	NT	Mus musculus gasdermin (Gsdm), mRNA
5058	14928	24700	1.76	5.0E-18	D61517.1	EST_HUMAN	HUM411F05B Clontech human fetal brain polyA+ mRNA (#8636) Homo sapiens cDNA clone GEN-411F05 5'
5224	15147	24914	1.38	5.0E-18	AF087913.1	NT	Human endogenous retrovirus HERV-P-T47D
7061	16938	27128	4.26	5.0E-18	BE143312.1	EST_HUMAN	MR0-HT0161-221099-002-c06 HT0161 Homo sapiens cDNA
8346	18223	28474	4.33	5.0E-18	10242378	NT	Homo sapiens lymphocyte activation-associated protein (LOC51088), mRNA
8346	18223	28475	4.33	5.0E-18	10242378	NT	Homo sapiens lymphocyte activation-associated protein (LOC51088), mRNA
9612	15125		5.3	5.0E-18	AW867182.1	EST_HUMAN	MR1-SN0035-060400-001-g11 SN0035 Homo sapiens cDNA
9837	16336		13	5.0E-18	AV650547.1	EST_HUMAN	AV650547 GLC Homo sapiens cDNA clone GLOC6A02 3'
119	10096	19915	1.36	4.0E-18	BE044076.1	EST_HUMAN	h036h04.x1 NCL_CGAP_Ut1 Homo sapiens cDNA clone IMAGE:3039511 3' similar to contains MER29.b3 MER29 repetitive element;
119	10096	19916	1.36	4.0E-18	BE044076.1	EST_HUMAN	h036h04.x1 NCL_CGAP_Ut1 Homo sapiens cDNA clone IMAGE:3039511 3' similar to contains MER29.b3 MER29 repetitive element;
1846	11742		1.08	4.0E-18	AI738592.1	EST_HUMAN	w133h08.x1 NCL_CGAP_Cot16 Homo sapiens cDNA clone IMAGE:2392095 3'
2154	12042	21940	0.98	4.0E-18	Q06430	SWISSPROT	N-ACETYLACTOSAMINIDE BETA-1,6-N-ACETYLGLUCOSAMINYLTRANSFERASE (N-ACETYLGLUCOSAMINYLTRANSFERASE) (I-BRANCHING ENZYME) (IGNT)
2154	12042	21941	0.98	4.0E-18	Q06430	SWISSPROT	N-ACETYLACTOSAMINIDE BETA-1,6-N-ACETYLGLUCOSAMINYLTRANSFERASE (N-ACETYLGLUCOSAMINYLTRANSFERASE) (I-BRANCHING ENZYME) (IGNT)
5293	15214	25014	2.55	4.0E-18	AI017565.1	EST_HUMAN	ou23e06.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1627138 3'

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Table 4
Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5293	15214	25015	2.55	4.0E-18	AI017565.1	EST_HUMAN	ou23a06.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1627138 3'
8370	18247	28499	7.12	4.0E-18	AA371807.1	EST_HUMAN	EST83633 Pituitary gland, subtracted (prolactin/growth hormone) II Homo sapiens cDNA 5' end similar to EST containing O family repeat
831	10758	20609	2.38	3.0E-18	AA814196.1	EST_HUMAN	ob23h11.s1 NCI_CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1324581 3' similar to SW:RS5_HUMAN
914	10838	20686	2.41	3.0E-18	BE088634.1	EST_HUMAN	P46782 40S RIBOSOMAL PROTEIN S5. ;
3867	13778	23571	1.19	3.0E-18	AL163247.2	NT	CM0-BT0690-210300-298-g07 BT0690 Homo sapiens cDNA
6084	16029	26169	5.2	3.0E-18	BE001671.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C047
9842	19210		4.92	3.0E-18	AW022015.1	EST_HUMAN	PM0-BN0081-100300-001-b08 BN0081 Homo sapiens cDNA
251	10217	20034	2.83	2.0E-18	AW836820.1	EST_HUMAN	df31h12.y1 Morton Fetal Cochlea Homo sapiens cDNA clone IMAGE:2485126 5'
1135	11049		47.22	2.0E-18	BE256097.1	EST_HUMAN	QV1-L T0036-150200-070-e07 LT0036 Homo sapiens cDNA
5322	15242		3.2	2.0E-18	AA868610.1	EST_HUMAN	601114352F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3355044 5'
5390	15299	25149	3.04	2.0E-18	D14547.1	NT	alk53a07 s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1409852 3' similar to TR:O14577
5390	15299	25150	3.04	2.0E-18	D14547.1	NT	O14577 BAC CLONE RG114A06 FROM 7Q31, COMPLETE SEQUENCE. ;
5585	15500		1.67	2.0E-18	BF347229.1	EST_HUMAN	Human DNA, SINE repetitive element
5814	15720	25834	3.53	2.0E-18	AW665853.1	EST_HUMAN	Human DNA, SINE repetitive element
7779	17629	27861	1.53	2.0E-18	AW151673.1	EST_HUMAN	602021164F1 NCI_CGAP_Bn07 Homo sapiens cDNA clone IMAGE:4156670 5'
7779	17629	27862	1.53	2.0E-18	AW151673.1	EST_HUMAN	h94g01.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2979984 3' similar to contains MER19.12 MER19 repetitive element ;
8340	18217	28469	5.32	2.0E-18	AW470791.1	EST_HUMAN	x167e10.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2623146 3' similar to contains MER10.12
8968	18774	29065	4.44	2.0E-18	AW151299.1	EST_HUMAN	MER10 repetitive element ;
9325	11049		3.15	2.0E-18	BE256097.1	EST_HUMAN	x167e10.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2623146 3' similar to contains MER10.12
4318	14215		1.02	1.0E-18	T95408.1	EST_HUMAN	ha33d06.x1 NCI_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2875499 3' similar to contains THR.B3
5286	15208	24985	2.38	1.0E-18	AV653405.1	EST_HUMAN	THR repetitive element ;
5419	15340	25394	1.97	1.0E-18	D00099.1	NT	xg47e09.x1 NCI_CGAP_Ut1 Homo sapiens cDNA clone IMAGE:2630728 3' similar to contains MER8.b2
5419	15340	25395	1.97	1.0E-18	D00099.1	NT	MER8 repetitive element ;
5883	15790	25912	1.32	1.0E-18	AL163280.2	NT	601114352F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3355044 5'
							ye43g05.r1 Soares fetal liver spleen 1NFSL Homo sapiens cDNA clone IMAGE:120536 5' similar to contains L1 repetitive element ;
							AV653405 GLC Homo sapiens cDNA clone GLODKE11 3'
							Homo sapiens mRNA for Na,K-ATPase alpha-subunit, complete cds
							Homo sapiens mRNA for Na,K-ATPase alpha-subunit, complete cds
							Homo sapiens chromosome 21 segment HS21C080

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7696	17546	27769	4.4	1.0E-18	U91328.1	NT	Human hereditary haemochromatosis region, histone 2A-like protein gene, hereditary haemochromatosis (HLA-H) gene, RoRet gene, and sodium phosphate transporter (NP-T3) gene, complete cds
9277	18980	25324	2.53	1.0E-18	AF003629.1	NT	Homo sapiens glycican 3 (GPC3) gene, partial cds and flanking repeat regions
533	10475	20289	4.28	9.0E-19	AA281961.1	EST_HUMAN	z11d06.t1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712811 5' similar to contains MER19.t2
534	10475	20289	3.19	9.0E-19	AA281961.1	EST_HUMAN	MER19 repetitive element;
6694	16464		5.21	9.0E-19	F08688.1	EST_HUMAN	z11d06.t1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712811 5' similar to contains MER19.t2
7042	16919	27110	2.46	9.0E-19	AL163203.2	NT	HSC23F051 normalized infant brain cDNA Homo sapiens cDNA clone c-23f05
7042	16919	27111	2.46	9.0E-19	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
8470	18343	28608	3.88	9.0E-19	AB032969.1	NT	Homo sapiens chromosome 21 segment HS21C003
9042	10475	20289	8.69	9.0E-19	AA281961.1	EST_HUMAN	Homo sapiens mRNA for KIAA1143 protein, partial cds
1032	10960		1.54	8.0E-19	AW974902.1	EST_HUMAN	z11d06.t1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712811 5' similar to contains MER19.t2
2198	12085	21987	1.58	7.0E-19	4758139	NT	MER19 repetitive element;
5884	15791	25913	2.15	7.0E-19	AF092030.1	NT	EST387007 IMAGE resequences, MAGN Homo sapiens cDNA
9179	19742		2.95	7.0E-19	AA705684.1	EST_HUMAN	Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 6 (RNA helicase, 54kD) (DDX6) mRNA
3713	13626		1.02	6.0E-19	AW852930.1	EST_HUMAN	Rattus norvegicus cp151 mRNA, partial cds
4360	14256	24041	1.36	6.0E-19	P34986	SWISSPROT	z160b01.st Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:435145 3'
4360	14256	24042	1.36	6.0E-19	P34986	SWISSPROT	PM0-CT0248-131099-001-g01 CT0248 Homo sapiens cDNA
4694	14580		1.16	6.0E-19	AJ271735.1	NT	OLFACTORY RECEPTOR 6 (M50)
4952	14829	24595	1.09	6.0E-19	AL120817.1	EST_HUMAN	Homo sapiens Xq pseudautosomal region; segment 1/2
5571	15486	25562	5.24	5.0E-19	Q00193	SWISSPROT	DKFZ762F192.1 762 (synonym: hmel2) Homo sapiens cDNA clone DKFZp762F192.5'
3824	18637	28921	7.19	5.0E-19	AW183725.1	EST_HUMAN	ZONA PELLUCIDA SPERM-BINDING PROTEIN B PRECURSOR (ZONA PELLUCIDA GLYCOPROTEIN ZP-X) (RC55)
9849	19485		1.52	5.0E-19	U66060.1	NT	X87002.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2664171 3' similar to contains element MSR1 repetitive element;
542	10483	20283	1.45	4.0E-19	AB007970.1	NT	Human germline T-cell receptor beta chain TCRBV13S1, TCRBV6S8A2T, TCRBV5S6A3N2T, TCRBV13S6A2T, TCRBV6S9P, TCRBV6S3A2T, TCRBV13S8P, TCRBV6S3A1N1T, TCRBV6S2, TCRBV6S6A2T, TCRBV6S7P, TCRBV13S4, TCRBV6S2A1N1T, TCRBV6S4A2T, TCRBV6S4A1, TCRBV23S1A2T, TCRBV12>
2649	12516	22406	1.39	4.0E-19	BF697382.1	EST_HUMAN	Homo sapiens mRNA, chromosome 1 specific transcript KIAA0501
							602130910F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4287674 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3778	13690	23476	1.74	3.0E-19	Q28997	SWISSPROT	BETA-2 ADRENERGIC RECEPTOR
3778	13690	23476	1.74	3.0E-19	Q28997	SWISSPROT	BETA-2 ADRENERGIC RECEPTOR
4345	14242	24024	1.18	3.0E-19	AV708136.1	EST_HUMAN	AV708136 ADC Homo sapiens cDNA clone ADCAMA11 5'
6370	16232		2.47	3.0E-19	114322214	NT	Homo sapiens similar to aldo-keto reductase family 1, member B11 (aldose reductase-like) (H. sapiens) (LOC63222), mRNA
7443	16456	26645	1.23	3.0E-19	X98685.1	NT	M.musculus mRNA for TPCR33 protein
9416	19088		7.38	3.0E-19	AF165520.1	NT	Homo sapiens phorbol 1 protein (PB1) mRNA, complete cds
2513	12387	22279	17.57	2.0E-19	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
6849	16728	26923	8.96	2.0E-19	AA012854.1	EST_HUMAN	ze34c09.r1 Soares retina N2b4HR Homo sapiens cDNA clone IMAGE:360980 5'
473	10417		1.6	1.0E-19	BE408611.1	EST_HUMAN	60'304125F1 NIH_MGC 21 Homo sapiens cDNA clone IMAGE:3638310 5'
2118	12007	21906	1.4	1.0E-19	H30795.1	EST_HUMAN	y079g07.r1 Soares adult brain N2b4HB55Y Homo sapiens cDNA clone IMAGE:184188 5' similar to contains MER10 repetitive element;
2695	12550		2.88	1.0E-19	D38044.1	NT	Human gene for Ah-receptor, exon 7-9
2817	12746		5.03	1.0E-19	4758977	NT	Homo sapiens protein tyrosine phosphatase, non-receptor type substrate 1 (PTPNS1) mRNA
3355	13274	23075	1.27	1.0E-19	AA834987.1	EST_HUMAN	aj49b12.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1393631 3' similar to contains MER37.t2
5701	15609	25711	2.37	1.0E-19	U12186.1	NT	MER37 repetitive element;
6919	16797	26990	1.79	1.0E-19	M64657.1	NT	Cryptolegus curiculatus sodium/dicarboxylate cotransporter mRNA, partial cds
7076	18953		2.83	1.0E-19	T99920.1	EST_HUMAN	Rabbit phosphorylase kinase beta subunit mRNA, complete cds
7853	17703	27948	25.21	1.0E-19	AW812259.1	EST_HUMAN	ye72b02.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:123243 5' similar to contains OFR repetitive element;
7857	17707	27953	1.79	1.0E-19	N44631.1	EST_HUMAN	RC0-ST0174-191099-031-b05 ST0174 Homo sapiens cDNA
6005	15910	26035	2.22	8.0E-20	7657285	NT	yw31e09.r1 Soares melanocyte 2NblHM Homo sapiens cDNA clone IMAGE:272872 5'
6005	15910	26036	2.22	8.0E-20	7657285	NT	yw31e09.r1 Soares melanocyte 2NblHM Homo sapiens cDNA clone IMAGE:272872 5'
6439	16300	26462	1.31	8.0E-20	AI221371.1	EST_HUMAN	Mus musculus keratin-associated protein 9-1 (Krtap9-1), mRNA
6439	16300	26463	1.31	8.0E-20	AI221371.1	EST_HUMAN	Mus musculus keratin-associated protein 9-1 (Krtap9-1), mRNA
3238	13161	22981	0.88	7.0E-20	BF326455.1	EST_HUMAN	qg86f09.x1 Soares NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1842089 3'
6176	15133	24852	5.53	7.0E-20	AL138120.1	EST_HUMAN	qg86f09.x1 Soares NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1842089 3'
6947	16825	27018	10.99	7.0E-20	AA557657.1	EST_HUMAN	PM4-AN0096-050900-003-a04 AN0096 Homo sapiens cDNA
6947	16825	27019	10.99	7.0E-20	AA557657.1	EST_HUMAN	DKFZp547D092.r1 547 (synonym: htfbr1) Homo sapiens cDNA clone DKFZp547D092 5'
8952	18759		10.45	7.0E-20	6912633	NT	n46c04.s1 NCL_CGAP_P14 Homo sapiens cDNA clone IMAGE:1043718 similar to contains MER29.b2
3508	13424	23227	3.85	6.0E-20	P39188	SWISSPROT	MER29 repetitive element;
							n46c04.s1 NCL_CGAP_P14 Homo sapiens cDNA clone IMAGE:1043718 similar to contains MER29.b2
							MER29 repetitive element;
							Homo sapiens ribosomal protein L13a (RPL13A), mRNA
							ALU SUBFAMILY J SEQUENCE CONTAMINATION WARNING ENTRY

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4175	14075	23850	2.55	6.0E-20	BE622434.1	EST_HUMAN	601441231F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3916231 5'
4491	14385		1.17	5.0E-20	AV725123.1	EST_HUMAN	AV725123 HTC Homo sapiens cDNA clone HT09TA01 5'
6634	16514	26704	4.66	5.0E-20	W90525.1	EST_HUMAN	zh78d08.s1 Soares_feial_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:418191 3' similar to contains MER30.t1 MER30 repetitive element ;
6634	16514	26705	4.66	5.0E-20	W90525.1	EST_HUMAN	zh78d08.s1 Soares_feial_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:418191 3' similar to contains MER30.t1 MER30 repetitive element ;
7128	17005	27197	1.44	5.0E-20	AB028174.1	NT	Mus musculus MMAN-g mRNA, complete cds
7128	17005	27198	1.44	5.0E-20	AB028174.1	NT	Mus musculus MMAN-g mRNA, complete cds
6624	16504		6.03	4.0E-20	AB74362.1	EST_HUMAN	tz64g03.x1 NCI_CGAP_Ov35 Homo sapiens cDNA clone IMAGE:2293396 3'
7935	17845	28087	1.17	4.0E-20	AW937469.1	EST_HUMAN	QV3-DT0043-090200-080-c04 DT0043 Homo sapiens cDNA
2092	11981	21876	1.04	3.0E-20	U03888.1	NT	Human BXP21 gene
4115	14015	23795	1.69	3.0E-20	P23273	SWISSPROT	OLFACTORY RECEPTOR-LIKE PROTEIN 114
4524	14417	24201	0.86	3.0E-20	AA037616.1	EST_HUMAN	zh3b12.s1 Soares_pregnant_uterus_Nbl-PU Homo sapiens cDNA clone IMAGE:484895 3' similar to contains L1.13 L1 repetitive element ;
7172	17049		3.26	3.0E-20	D14547.1	NT	Human DNA, SINE repetitive element
8055	17946		2.08	3.0E-20	P11369	SWISSPROT	RETROVIRUS-RELATED POLYPROTEIN [CONTAINS: REVERSE TRANSCRIPTASE ; ENDONUCLEASE]
9195	18929	25352	5.37	3.0E-20	BE888422.1	EST_HUMAN	601514180F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3915522 5'
813	10741		4.52	2.0E-20	AW303868.1	EST_HUMAN	xr24e10.x1 NCI_CGAP_U14 Homo sapiens cDNA clone IMAGE:2761098 3' similar to SW:RS5_MOUSE P97461 40S RIBOSOMAL PROTEIN S5 ;
1095	11011	20852	2.03	2.0E-20	AA516335.1	EST_HUMAN	ng69h09.s1 NCI_CGAP_Lip2 Homo sapiens cDNA clone IMAGE:940097 similar to TR:G1224066
1095	11011	20853	2.03	2.0E-20	AA516335.1	EST_HUMAN	ng69h09.s1 NCI_CGAP_Lip2 Homo sapiens cDNA clone IMAGE:940097 similar to TR:G1224066
2786	10741		2.72	2.0E-20	AW303868.1	EST_HUMAN	xr24e10.x1 NCI_CGAP_U14 Homo sapiens cDNA clone IMAGE:2761098 3' similar to SW:RS5_MOUSE P97461 40S RIBOSOMAL PROTEIN S5 ;
4866	14746	24525	4.32	2.0E-20	Q28983	SWISSPROT	ZONADHESIN PRECURSOR
4866	14746	24526	4.32	2.0E-20	Q28983	SWISSPROT	ZONADHESIN PRECURSOR
5090	14960		11.35	2.0E-20	5174538	NT	Homo sapiens malate dehydrogenase 1, NAD (soluble) (MDH1) mRNA
7301	17177	27378	2.95	2.0E-20	D10083.1	NT	Homo sapiens RGH1 gene, retrovirus-like element
7301	17177	27379	2.95	2.0E-20	D10083.1	NT	Homo sapiens RGH1 gene, retrovirus-like element
8993	18797	29089	1.95	2.0E-20	AA766755.1	EST_HUMAN	oa35b08.s1 NCI_CGAP_G0B1 Homo sapiens cDNA clone IMAGE:1306935 3' similar to contains MER4.b2 MER4 repetitive element ;

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Table 4
Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8993	18797	29090	1.95	2.0E-20	AA766755.1	EST_HUMAN	ca35b08.s1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1306935 3' similar to contains MER4.b2
9574	19482	25129	1.5	2.0E-20	H55371.1	EST_HUMAN	MER4 repetitive element ;
1967	12648	21751	5.25	1.0E-20	AA281961.1	EST_HUMAN	CHR2203:10 Chromosome 22 exon Homo sapiens cDNA clone C22_391 5'
4338	14235	24018	1	1.0E-20	BF115158.1	EST_HUMAN	zf11d06.r1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:712811 5' similar to contains MER19.12
7285	17161	27359	2.42	1.0E-20	11418491	NT	MER19 repetitive element ;
8839	18652	28940	2.81	1.0E-20	AF223391.1	NT	hr84b06.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3135155 3' similar to contains L1.12 L1
9321	19011		1.84	1.0E-20	AA420453.1	EST_HUMAN	repetitive element ;
2883	12810		1.08	9.0E-21	AJ003514.1	EST_HUMAN	Homo sapiens Autosomal Highly Conserved Protein (AHCP), mRNA
9045	18530		2.35	9.0E-21	AW898189.1	EST_HUMAN	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
7115	16992		1.74	8.0E-21	AW674891.1	EST_HUMAN	nc80g08.r1 NCL_CGAP_P11 Homo sapiens cDNA clone IMAGE:745694 similar to contains L1.f3 L1
8825	18638	28922	3.42	8.0E-21	AA809411.1	EST_HUMAN	repetitive element ;
9207	18938		4.02	8.0E-21	O21330	SWISSPROT	AJ003514 Selected chromosome 21 cDNA library Homo sapiens cDNA clone MIP12-8J21
2023	11914	21803	2.07	7.0E-21	P15800	SWISSPROT	RC3-NN0068-090500-021-803 NN0068 Homo sapiens cDNA
2023	11914	21804	2.07	7.0E-21	P15800	SWISSPROT	bb30a02.y1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2984714 5' similar to SW:NIAM_HUMAN
4161	14061		4.96	7.0E-21	AA046502.1	EST_HUMAN	O95169 NADH-UBIQUINONE OXIDOREDUCTASE ASH1 SUBUNIT PRECURSOR ;
6887	16766	26962	1.43	7.0E-21	AJ277557.1	NT	Q95169 NADH-UBIQUINONE OXIDOREDUCTASE ASH1 SUBUNIT PRECURSOR ;
7036	16913	27102	6.84	7.0E-21	D14718.1	NT	Q95169 NADH-UBIQUINONE OXIDOREDUCTASE ASH1 SUBUNIT PRECURSOR ;
8080	17971	28220	2.94	7.0E-21	AA723404.1	EST_HUMAN	Q95169 NADH-UBIQUINONE OXIDOREDUCTASE ASH1 SUBUNIT PRECURSOR ;
8590	18458	28727	2.37	7.0E-21	7706668	NT	Q95169 NADH-UBIQUINONE OXIDOREDUCTASE ASH1 SUBUNIT PRECURSOR ;
4014	13920	23996	0.94	6.0E-21	BE40861.1	EST_HUMAN	Q95169 NADH-UBIQUINONE OXIDOREDUCTASE ASH1 SUBUNIT PRECURSOR ;
907	10831	20878	1.6	5.0E-21	5902031	NT	Q95169 NADH-UBIQUINONE OXIDOREDUCTASE ASH1 SUBUNIT PRECURSOR ;
2234	12119	22021	1.08	5.0E-21	AA928194.1	EST_HUMAN	Q95169 NADH-UBIQUINONE OXIDOREDUCTASE ASH1 SUBUNIT PRECURSOR ;
4266	14165	23942	2.65	5.0E-21	BE98839.1	EST_HUMAN	Q95169 NADH-UBIQUINONE OXIDOREDUCTASE ASH1 SUBUNIT PRECURSOR ;
4696	14582	24375	5.98	5.0E-21	4885474	NT	Q95169 NADH-UBIQUINONE OXIDOREDUCTASE ASH1 SUBUNIT PRECURSOR ;

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Database Source	Top Hit Descriptor
5109	14977		0.95	5.0E-21	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
1701	11602	21473	1.24	4.0E-21	EST_HUMAN	cc86e08.s1 NCL_CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1573094 3' similar to TR:Q16530 Q16530
6106	16000	26138	3.06	4.0E-21	AB019576.1	PMS3 mRNA ;contains OFR.11 OFR repetitive element;
2228	12113	22015	1.06	3.0E-21	AL163201.2	Rattus norvegicus mRNA for rTIM, complete cds
3041	12968	22762	4.04	3.0E-21	AJ007973.1	Homo sapiens chromosome 21 segment HS21C001
5749	15657		1.72	3.0E-21	BF184739.1	Homo sapiens LGMD2B gene
6206	15966	26100	4.79	3.0E-21	BF361093.1	601844465F1 NIH_MGC_54 Homo sapiens cDNA clone IMAGE:4084945 5'
7589	17440	27656	1.55	3.0E-21	AW897780.1	RC1-OT0083-100800-019-g08 OT0083 Homo sapiens cDNA
9684	19672	24992	1.32	3.0E-21	AL163213.2	CM1-NN0063-280400-203-h08 NN0063 Homo sapiens cDNA
140	10114		14.75	2.0E-21	BE163247.1	Homo sapiens chromosome 21 segment HS21C013
919	10843	20688	0.85	2.0E-21	AB007857.2	QV3-HT0458-170200-060-g12 HT0458 Homo sapiens cDNA
919	10843	20689	0.85	2.0E-21	AB007857.2	Homo sapiens mRNA for KIAA0397 protein, partial cds
1196	11106		2.09	2.0E-21	BE064410.1	RC4-BT0311-141199-011-h06 BT0311 Homo sapiens cDNA
2599	12468	22361	2.89	2.0E-21	Q28983	ZONADHESIN PRECURSOR
2599	12468	22362	2.89	2.0E-21	Q28983	ZONADHESIN PRECURSOR
5370	15290	25126	1.77	2.0E-21	A624592.1	ts30f03.x1 NCL_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2230109 3' similar to TR:Q99854 Q99854
6870	16749	26944	4.66	2.0E-21	BE141785.1	HYPOTHETICAL 51.1 KD PROTEIN;
7122	16999	27190	3.43	2.0E-21	AU136779.1	QV0-HT0103-091199-050-g11 HT0103 Homo sapiens cDNA
8412	18287		1.98	2.0E-21	BE350127.1	AU136779 PLACE1 Homo sapiens cDNA clone IMAGE:1005052 5'
8636	18501	28776	1.92	2.0E-21	BE973829.1	ht09g01.x1 NCL_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3146256 3' similar to contains MER29.b3
8636	18501	28777	1.92	2.0E-21	BE973829.1	MER29 repetitive element;
9425	19072		5.13	2.0E-21	AF176815.1	601680636F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:3951008 5'
1235	11142	20894	1.68	1.0E-21	AA557657.1	601680636F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:3951008 5'
1381	11286		2.46	1.0E-21	AI601264.1	Homo sapiens putative 8-hydroxyguanine DNA glycosylase gene, complete cds
5907	15813		2.43	1.0E-21	AL079752.1	Homo sapiens putative 8-hydroxyguanine DNA glycosylase gene, complete cds
6269	16134	26289	4.43	1.0E-21	AI223104.1	MER29 repetitive element;
8021	17871		1.46	1.0E-21	5730038	nt46c04.s1 NCL_CGAP_P14 Homo sapiens cDNA clone IMAGE:1043718 similar to contains MER29.b2
4312	14209	23993	2.55	9.0E-22	AI702438.1	at88d12.x1 Barsiad colon HPLRB7 Homo sapiens cDNA clone IMAGE:2152343 3'
						DKFZp434i0830.t1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434i0830 5'
						gg47e05.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1838336 3' similar to gb:IM64241 QM
						PROTEIN (HUMAN);
						Homo sapiens SET domain and mariner transposase fusion gene (SETMAR) mRNA
						t294a03.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2296204 3' similar to TR:Q15408 Q15408
						NEUTRAL PROTEASE LARGE SUBUNIT;

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7002	16879	27070	1.26	9.0E-22	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
7002	16879	27071	1.26	9.0E-22	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
8171	18059	28309	3.65	9.0E-22	AV781874.1	EST_HUMAN	AV781874 MDS Homo sapiens cDNA clone MDSOCCG05 5'
8945	18753	29048	2.92	9.0E-22	AU140358.1	EST_HUMAN	AU140358 PLACE2 Homo sapiens cDNA clone PLACE2000394 5'
8997	18800		2.39	9.0E-22	9790286	NT	Mus musculus TF-1 cell apoptosis related protein-15 (Ttar15), mRNA
933	10858		4.55	8.0E-22	BE144748.1	EST_HUMAN	CMO-HT0179-281039-076-h05 HT0179 Homo sapiens cDNA
6609	16489		3.8	8.0E-22	AA046502.1	EST_HUMAN	z467a06.11 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:487858 5'
649	10585	20401	4.23	7.0E-22	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
4186	14086	23861	2.32	7.0E-22	Q61838	SWISSPROT	ALPHA-2-MACROGLOBULIN PRECURSOR (ALPHA2M)
4969	14844	24613	1.18	7.0E-22	AB008681.1	NT	Homo sapiens gene for activin receptor type IIB, complete cds
7044	16921		1.34	7.0E-22	AF151054.1	NT	Homo sapiens HSPC220 mRNA, complete cds
7127	17004	27196	2.63	7.0E-22	M78590.1	EST_HUMAN	EST00738 Fetal brain, Stratagene (cat#936206) Homo sapiens cDNA clone HFBFCF07
7538	17389	27599	1.86	7.0E-22	AF009680.1	NT	Homo sapiens T cell receptor beta locus, TCRBV7S3A2 to TCRBV12S2 region
6796	16675		1.82	6.0E-22	AW029123.1	EST_HUMAN	wx05g07.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2542812 3'
5927	15832	25955	2.53	5.0E-22	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
7912	17762	28001	3.97	5.0E-22	U60822.1	NT	Human dystrophin (DMD) gene, exons 7, 8 and 9, and partial cds
9645	19213		2.03	5.0E-22	BF476511.1	EST_HUMAN	naa27b06.x1 NCI_CGAP_P128 Homo sapiens cDNA clone IMAGE:3255989 3' similar to contains Alu repetitive element;
3584	13498		0.85	4.0E-22	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region: segment 1/2
6902	19767		2.7	4.0E-22	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
8105	17995	28244	2.97	4.0E-22	BF218030.1	EST_HUMAN	601882813F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4095434 5'
9803	19315		1.51	4.0E-22	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
943	10868		1.2	3.0E-22	AI469679.1	EST_HUMAN	tm14h10.x1 NCI_CGAP_Co14 Homo sapiens cDNA clone IMAGE:27156811 3' similar to gb.L19593 HIGH AFFINITY INTERLEUKIN-8 RECEPTOR B (HUMAN); contains L1.11 L1 repetitive element;
2523	12397	22288	1.86	3.0E-22	AI959038.1	EST_HUMAN	wl66b04.x1 NCI_CGAP_Brr25 Homo sapiens cDNA clone IMAGE:2429839 3' similar to SW:RL21_HUMAN
3620	13534		1.49	3.0E-22	D14718.1	NT	P46778 60S RIBOSOMAL PROTEIN L21.;
4695	14581	24374	2.72	3.0E-22	AI090125.1	EST_HUMAN	Human chromosomal protein HMG1 related gene
6793	16672	26864	2.75	3.0E-22	BE089841.1	EST_HUMAN	qb28c07.x1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:1697580 3' similar to contains MER12.12 MER12 repetitive element;
1910	11805		2.86	2.0E-22	N24942.1	EST_HUMAN	RC5-BT0707-150300-021-H10 BT0707 Homo sapiens cDNA
2476	12352	22244	1.33	2.0E-22	P24916	SWISSPROT	wx73a05.s1 Soares_melanocyte_2NbHM Homo sapiens cDNA clone IMAGE:267369 3'
3373	13292	23091	4.06	2.0E-22	8394043	NT	IMMEDIATE EARLY GENE 13 PROTEIN PRECURSOR
4133	14033	23808	1.26	2.0E-22	AW817794.1	EST_HUMAN	Homo sapiens protein kinase, AMP-activated, gamma 3 non-catalytic subunit (PRKAG3), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5570	19447	25561	1.44	2.0E-22	W39456.1	EST_HUMAN	z020f0.1.r1 Soares_senescent_fibroblasts_NbHSF Homo sapiens cDNA clone IMAGE:322873 5' similar to gb:X72308 MONOCYTE CHEMOTACTIC PROTEIN 3 PRECURSOR (HUMAN);
5747	15655	25763	3.39	2.0E-22	BF092116.1	EST_HUMAN	RCO-TN0079-150900-025-h12 TN0079 Homo sapiens cDNA
7595	17446	27661	1.49	2.0E-22	AI276522.1	EST_HUMAN	q176h06.x1 Soares_NhHMPu_S1 Homo sapiens cDNA clone IMAGE:1878239 3' similar to contains MER29.i3 MER29 repetitive element;
7640	17490	27710	7.07	2.0E-22	AA715315.1	EST_HUMAN	nv04h11.s1 NCL CGAP_Pt22 Homo sapiens cDNA clone IMAGE:1219269 3'
7640	17490	27711	7.07	2.0E-22	AA715315.1	EST_HUMAN	nv04h11.s1 NCL CGAP_Pt22 Homo sapiens cDNA clone IMAGE:1219269 3'
8974	18779	29071	2.04	2.0E-22	AW418960.1	EST_HUMAN	ha24f04.x1 NCL CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2874655 3'
9009	19304	28200	1.85	2.0E-22	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
1836	11733	21609	1.78	1.0E-22	AW865517.1	EST_HUMAN	PM4-SN0020-010400-009-h02 SN0020 Homo sapiens cDNA
2539	12413	22303	2.65	1.0E-22	U50871.1	NT	Human familial Alzheimer's disease (STM2) gene, complete cds
3365	13284	23084	1.74	1.0E-22	D14547.1	NT	Human DNA, SINE repetitive element
6553	16411	26589	1.49	1.0E-22	BE084667.1	EST_HUMAN	MR0-BT0659-220200-002-h07 BT0659 Homo sapiens cDNA
9844	18342		4.71	9.0E-23	AW802801.1	EST_HUMAN	IL2-UM0076-070400-061-F11 UM0076 Homo sapiens cDNA
3523	13439	23236	0.84	8.0E-23	AF198349.1	NT	Gallus gallus Dach2 protein (Dach2) mRNA, complete cds
5241	15165	24935	1.48	8.0E-23	AI133716.1	EST_HUMAN	HA2340 Human fetal liver cDNA library Homo sapiens cDNA
5241	15165	24936	1.48	8.0E-23	AI133716.1	EST_HUMAN	HA2340 Human fetal liver cDNA library Homo sapiens cDNA
3271	13192		1.45	7.0E-23	AV047246.1	EST_HUMAN	AV047246 GLC Homo sapiens cDNA clone GLCAWC07 3'
4764	14649	24438	1.04	7.0E-23	10092626	NT	Homo sapiens DKFZP564O0463 protein (DKFZP564O0463), mRNA
8398	18274	28626	3.51	7.0E-23	5031952	NT	Homo sapiens Not56 (D. melanogaster)-like protein (NOT56L) mRNA
3387	13305		1.62	6.0E-23	AF199333.1	NT	Rattus norvegicus RIM1B (Rim1B) mRNA, complete cds
4171	14071	23846	3.12	6.0E-23	AL163249.2	NT	Homo sapiens chromosome 21 segment HS21C049
9146	18899	25338	1.99	6.0E-23	AF224669.1	NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
9146	18899	25339	1.99	6.0E-23	AF224669.1	NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
9341	19021	25297	2.18	6.0E-23	AI209130.1	EST_HUMAN	qg59c03.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1839450 3' similar to SW:MV10_MOUSE_P23249 PROTEIN MOV-10.;
5341	15262	25088	3.51	5.0E-23	U62071.2	NT	Homo sapiens chromosome Xq28 melanoma antigen family A2a (MAGEA2A), melanoma antigen family A12 (MAGEA12), melanoma antigen family A2b (MAGEA2B), melanoma antigen family A3 (MAGEA3), calretinin (CALT), NAD(P)H dehydrogenase-like protein (NSDHL), and L1>
5781	19454	25797	3.51	5.0E-23	AF179818.1	NT	Pongo pygmaeus olfactory receptor (PPY116) gene, partial cds
6397	19454	25797	3.04	5.0E-23	AF179818.1	NT	Pongo pygmaeus olfactory receptor (PPY116) gene, partial cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6580	19460	26653	3.56	3.0E-23	AA130165.1	EST_HUMAN	z185g09.r1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:503968 5' similar to contains MER29.t2 MER29 repetitive element;
7329	17233	27435	3.61	3.0E-23	Z70664.1	NT	Human endogenous retroviral element HC2
7329	17233	27436	3.61	3.0E-23	Z70664.1	NT	Human endogenous retroviral element HC2
650	10586	20402	4.36	2.0E-23	AJ289880.1	NT	Homo sapiens KIAA0851 gene (partial), XT3 gene and LZTFL1 gene
1126	12644		2.77	2.0E-23	M55270.1	NT	Human matrix Gla protein (MGP) gene, complete cds
2765	12627	22519	1.06	2.0E-23	P22105	SWISSPROT	TENASCIN-X PRECURSOR (TN-X) (HEXABRACHION-LIKE)
2765	12627	22520	1.06	2.0E-23	P22105	SWISSPROT	TENASCIN-X PRECURSOR (TN-X) (HEXABRACHION-LIKE)
3325	13245		1.46	2.0E-23	AJ201458.1	EST_HUMAN	qs73f11.x1 NCL CGAP_Pr28 Homo sapiens cDNA clone IMAGE:1943757 3' similar to TR:Q13537 Q13537
3655	13569		3.03	2.0E-23	BE165980.1	EST_HUMAN	MER37 TRANSPOSABLE ELEMENT, COMPLETE CONSENSUS SEQUENCE;
3894	13804	23589	2.98	2.0E-23	H99931.1	EST_HUMAN	MR3-HT0487-15020C-113-g01 HT0487 Homo sapiens cDNA
3894	13804	23590	2.98	2.0E-23	H99931.1	EST_HUMAN	yr16a02.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:205418 5'
							yr16a02.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:205418 5'
6595	16475		5.62	2.0E-23	AF280107.1	NT	Homo sapiens cytochrome P450 polypeptide 43 (CYP3A43) gene, partial cds; cytochrome P450 polypeptide 4 (CYP3A4) and cytochrome P450 polypeptide 7 (CYP3A7) genes, complete cds; and cytochrome P450 polypeptide 5 (CYP3A5) gene, partial cds
9131	18888		2.69	2.0E-23	M32658.1	NT	Human alcohol dehydrogenase gamma subunit (ADH3) gene, exon 1
9656	19218		2.47	2.0E-23	AF009660.1	NT	Homo sapiens T cell receptor beta locus, TCRBV7S3A2 to TCRBV12S2 region
9774	19676		2.02	2.0E-23	AJ133931.1	EST_HUMAN	AJ133931 OVARC1 Homo sapiens cDNA clone OVARC1000945 5'
4428	14323	24110	1.6	1.0E-23	AL163252.2	NT	Homo sapiens chromosome 21 segment HS21C052
4657	14543		4.49	1.0E-23	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
6034	15937		2.91	1.0E-23	BE378471.1	EST_HUMAN	601236455F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3608663 5'
6665	16744	26937	4.54	1.0E-23	AA448097.1	EST_HUMAN	zw62c06.r1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:782698 5' similar to contains PTR5.t2
							PTR5 repetitive element;
540	10481		1.88	9.0E-24	AA693213.1	EST_HUMAN	ab75a08.s1 Stratagene fetal retina 937202 Homo sapiens cDNA clone IMAGE:852758 3' similar to
4549	14442	24225	1.08	8.0E-24	P23269	SWISSPROT	TR:E19822 E19822 CA PROTEIN;
4549	14442	24226	1.08	8.0E-24	P23269	SWISSPROT	OLFACTORY RECEPTOR-LIKE PROTEIN I3
3796	13708		1.31	7.0E-24	AW937954.1	EST_HUMAN	OLFACTORY RECEPTOR-LIKE PROTEIN I3
690	10623		2.4	6.0E-24	AB001421.1	NT	QV0-DT0047-170200-122-a06 DT0047 Homo sapiens cDNA
820	10748	20595	10.14	6.0E-24	AL163249.2	NT	Macaca fascicularis mRNA for Testis-Specific Protein Y (TSPY), complete cds
3889	13800	23585	7.18	6.0E-24	AJ229043.1	NT	Homo sapiens chromosome 21 segment HS21C049
							Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22, segment 3/3
5611	15526	25609	3.06	4.0E-24	AA594178.1	EST_HUMAN	nm31h05.s1 NCL CGAP_Gas1 Homo sapiens cDNA clone IMAGE:1085529 3' similar to SW:POL_MLVRK
							P31795 POL POLYPYRROLINE;

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Table 4
Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9503	19121	25293	2.12	4.0E-24	AB029016.1	NT	Homo sapiens mRNA for KIAA1093 protein, partial cds
9748	19309	25203	1.53	4.0E-24	11418318	NT	Homo sapiens G-2 and S-phase expressed 1 (GTSE1), mRNA
6906	16784		3.02	3.0E-24	AW614871.1	EST_HUMAN	h168c08.x1 NCL_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2967960 3' similar to contains MER29.b2
7449	17258	27463	4.12	3.0E-24	AL163252.2	NT	MER29 repetitive element ;
9587	19171	25273	5.14	3.0E-24	BF127762.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C052
2298	12180	22078	2.33	2.0E-24	AA167839.1	EST_HUMAN	601810449F1 NIH_MGC_46 Homo sapiens cDNA clone IMAGE:4053396 5'
3729	13641		1.01	2.0E-24	AW898189.1	EST_HUMAN	zp71f09.r1 Stratagene fetal retina 937202 Homo sapiens cDNA clone IMAGE:609161 5'
7075	16952	27146	3.14	2.0E-24	AL119159.1	EST_HUMAN	RC3-NN0068-090500-021-b03 NN0068 Homo sapiens cDNA
9433	19717		6.55	2.0E-24	M28877.1	NT	DKFZp761L1712_r1 761 (synonym: hamy2), Homo sapiens cDNA clone DKFZp761L1712 5'
1670	11572	21438	2.18	1.0E-24	7706340	NT	Human O family dispersed repeat element
2638	12505		1.87	1.0E-24	AW820194.1	EST_HUMAN	Homo sapiens CGI-127 protein (LOC51646), mRNA
2987	12915	22710	0.91	1.0E-24	D86423.1	EST	QV0-ST0294-100400-185-c10 ST0294 Homo sapiens cDNA
4173	14073		1.63	1.0E-24	AF14313.1	NT	Mus musculus mRNA for HGT keratin, partial cds
6456	16317	26484	4.07	1.0E-24	AL163303.2	NT	Homo sapiens PTEN (PTEN) gene, exon 2
6633	16513	26703	1.98	1.0E-24	AW901164.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C103
4926	14805	24575	2.32	7.0E-25	AA483944.1	EST_HUMAN	CM0-NN1010-130300-281-d07 NN1010 Homo sapiens cDNA
6785	16664	26855	3.75	7.0E-25	AA488646.1	EST_HUMAN	ne92e10.s1 NCL_CGAP_Kid1 Homo sapiens cDNA clone IMAGE:911754 similar to contains MER1.b2
9942	18750	29045	7.46	7.0E-25	AA583540.1	EST_HUMAN	MER1 repetitive element ;
6174	15131		4.32	6.0E-25	W87623.1	EST_HUMAN	ne6a09.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:880408 3' similar to contains THR.b2 THR
6543	16401	26580	11.44	6.0E-25	7305360	NT	repetitive element ;
5166	15032	24799	0.95	5.0E-25	AW838171.1	EST_HUMAN	rf25h06.s1 NCL_CGAP_P11 Homo sapiens cDNA clone IMAGE:914843 similar to SW:R14A_YEAST
8634	18499	28774	3.61	5.0E-25	AW979107.1	EST_HUMAN	P36105 PROBABLE 60S RIBOSOMAL PROTEIN L14EA ;
1430	11335	21201	2.08	4.0E-25	T98107.1	EST_HUMAN	zh68h07.r1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:416989 5'
3356	13275		2.78	4.0E-25	AW987671.1	EST_HUMAN	Mus musculus clogelin (Otog), mRNA
4221	14119		3.02	4.0E-25	BE170957.1	EST_HUMAN	QV2-LT0051-280300-111-f03 LT0051 Homo sapiens cDNA
3278	13199	22999	2.66	3.0E-25	8923321	NT	QV2-LT0051-280300-111-f03 LT0051 Homo sapiens cDNA
3278	13199	23000	2.66	3.0E-25	8923321	NT	EST391217 IMAGE resequences, MAGP Homo sapiens cDNA
4798	14893	24470	0.85	3.0E-25	P29622	SWISSPROT	ye56h04.r1 Soares_fetal_liver_spleen_1NFLS Homo sapiens cDNA clone IMAGE:121783 5'
6954	16733	26926	2.47	3.0E-25	AL163210.2	NT	PM3-OT0093-280200-001-g07 OT0093 Homo sapiens cDNA
							QV3-HT0543-140400-149-e11 HT0543 Homo sapiens cDNA
							Homo sapiens hypothetical protein FLJ20344 (FLJ20344), mRNA
							Homo sapiens hypothetical protein FLJ20344 (FLJ20344), mRNA
							KALLISTATIN PRECURSOR (KALLIKREIN INHIBITOR) (PROTEASE INHIBITOR 4)
							Homo sapiens chromosome 21 segment HS21C010

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6394	16270	28522	2.03	3.0E-25	AA579013.1	EST_HUMAN	nf30h10.s1 NCI_CGAP_P1 Homo sapiens cDNA clone IMAGE:915331 similar to contains L1.t1 L1 repetitive element;
1325	11232	21088	3.37	2.0E-25	5032158	NT	Homo sapiens transducin (beta)-like 1 (TBL1) mRNA
2260	12144	22043	7.11	2.0E-25	BE988016.1	EST_HUMAN	6015f1530F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913087 5'
2801	12370	22263	4.32	2.0E-25	P17008	SWISSPROT	40S RIBOSOMAL PROTEIN S16
4096	13996	23773	1.91	2.0E-25	P17008	SWISSPROT	40S RIBOSOMAL PROTEIN S16
4096	13996	23774	1.91	2.0E-25	P17008	SWISSPROT	40S RIBOSOMAL PROTEIN S16
7629	17480	27700	2.25	2.0E-25	AL449573.1	EST_HUMAN	AL449573 Homo sapiens Testis (Starvies GS) Homo sapiens cDNA
361	10317	20138	1.61	1.0E-25	AL040229.1	EST_HUMAN	DKFZp434H0313_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434:H0313 5'
1228	11136		1.21	1.0E-25	9635487	NT	Human endogenous retrovirus, complete genome
2384	12264	22156	2.79	1.0E-25	Q06055	SWISSPROT	ATP SYNTHASE LIPID-BINDING PROTEIN P2 PRECURSOR (ATPASE PROTEIN 9) (SUBUNIT C)
4753	14638	24425	2.71	1.0E-25	BE162737.1	EST_HUMAN	PM1-HT0454-080100-002-h09 HT0454 Homo sapiens cDNA
6069	19460	26199	2.85	1.0E-25	AA582690.1	EST_HUMAN	hn54h11.s1 NCI_CGAP_Kid6 Homo sapiens cDNA clone IMAGE:1087749 3'
							zf96g04.s1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:384822 3' similar to contains PTR5.13 PTR5 repetitive element;
6616	16496	26563	3.15	1.0E-25	AA709079.1	EST_HUMAN	Homo sapiens MAGB-B2 (MAGE-B2), MAGB-B3 (MAGE-B3), MAGB-B4 (MAGE-B4), and MAGB-B1 (MAGE-B1) genes, complete cds
8337	18214	28467	3.5	1.0E-25	U93163.1	NT	Human DNA, SINE repetitive element
9143	18897	28796	1.45	1.0E-25	D14547.1	NT	Human DNA, SINE repetitive element
9143	18897	28797	1.45	1.0E-25	D14547.1	NT	Human DNA, SINE repetitive element
9914	19389		1.32	1.0E-25	X51755.1	NT	Human lambda-immunoglobulin constant region complex (germline)
2433	12310	22206	1.94	9.0E-26	AL163218.2	NT	Homo sapiens chromosome 21 segment HS21C018
9010	19501		1.73	9.0E-26	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
5492	15411		1.56	8.0E-26	D14547.1	NT	Human DNA, SINE repetitive element.
1559	11464	21321	1.44	7.0E-26	AF003528.1	NT	Homo sapiens X-linked arthralgia ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
3898	13608	23594	1.35	7.0E-26	X8921.1	NT	Hi.sapiens DNA for endogenous retroviral like element
4067	13669	23745	2.03	7.0E-26	AW340153.1	EST_HUMAN	hd02e12.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2908366 3'
8923	18731		7.99	7.0E-26	AA115895.1	EST_HUMAN	zn30d08.r1 Stratagene neuroepithelium NT2RAM1 937234 Homo sapiens cDNA clone IMAGE:548943 5' similar to gb.M14336 VITAMIN K-DEPENDENT PROTEIN S PRECURSOR (HUMAN);
9700	19250		1.33	7.0E-26	AW954559.1	EST_HUMAN	EST366629 MAGE resequences, MAGC Homo sapiens cDNA
2178	12065	21967	2.44	6.0E-26	AF029308.1	NT	Homo sapiens chromosome 9 duplication of the T cell receptor beta locus and trypsinogen gene families
3302	13223	23025	1.42	6.0E-26	AA206131.1	EST_HUMAN	zq52h04.r1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone IMAGE:645271 5'
8932	18740	29033	4.98	6.0E-26	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010

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Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1160	11073	20918	3.33	5.0E-26	AI708235.1	EST_HUMAN	as38108.x1 Barstead aorta HPLRB6 Homo sapiens cDNA clone IMAGE:2319519 3' similar to WP:F49C12.11 CE03371;
1160	11073	20919	3.33	5.0E-26	AI708235.1	EST_HUMAN	as38108.x1 Barstead aorta HPLRB6 Homo sapiens cDNA clone IMAGE:2319519 3' similar to WP:F49C12.11 CE03371;
9976	19435		1.71	5.0E-26	AI761429.1	EST_HUMAN	wg66e06.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:2369986 3' similar to contains Alu repetitive element;
1525	11430		1.52	4.0E-26	AA329548.1	EST_HUMAN	EST133446 Embryo, 12 week II Homo sapiens cDNA 5' end
7416	17283		3.77	4.0E-26	7657670	NT	Homo sapiens upstream binding transcription factor, RNA polymerase I (UBTF), mRNA
8053	17944	28194	3.74	4.0E-26	BE266187.1	EST_HUMAN	601191345F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3535210 5'
1958	11853	21740	1.5	3.0E-26	AL045855.2	EST_HUMAN	DKFZp4344066_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp4341086 5'
1987	11880		2.41	3.0E-26	AA115895.1	EST_HUMAN	zn30408.r1 Stralagene neuroepithelium NT2RAMI_937234 Homo sapiens cDNA clone IMAGE:548943 5' similar to gb:MI4338 VITAMIN K-DEPENDENT PROTEIN S PRECURSOR (HUMAN);
3712	13625	23408	1.19	3.0E-26	AA152464.1	EST_HUMAN	z30f10.r1 Stralagene colon (#937204) Homo sapiens cDNA clone IMAGE:588427 5' similar to TR:G695374 G695374 THYROID RECEPTOR INTERACTOR;
3712	13625	23409	1.19	3.0E-26	AA152464.1	EST_HUMAN	z30f10.r1 Stralagene colon (#937204) Homo sapiens cDNA clone IMAGE:588427 5' similar to TR:G695374 G695374 THYROID RECEPTOR INTERACTOR;
6131	15978	26114	4.35	3.0E-26	BF245458.1	EST_HUMAN	601864963F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4083278 5'
8108	17998		2.18	3.0E-26	AF036405.1	NT	Homo sapiens MLL (MLL) gene, exons 1-3, and partial cds
8853	18665	28951	1.99	3.0E-26	AW875651.1	EST_HUMAN	QV2-PT0012-040400-124-e05 PT0012 Homo sapiens cDNA
8853	18665	28952	1.99	3.0E-26	AW875651.1	EST_HUMAN	QV2-PT0012-040400-124-e05 PT0012 Homo sapiens cDNA
8879	18691	28984	10.55	3.0E-26	AA583173.1	EST_HUMAN	mn37405.s1 NCI_CGAP_GC5 Homo sapiens cDNA clone IMAGE:1086057 3' similar to contains OFR.t1 OFR repetitive element;
666	10600	20418	5.81	2.0E-26	AL163282.2	NT	Homo sapiens chromosome 21 segment HS21C082
1826	11722		3.35	2.0E-26	AL038099.2	EST_HUMAN	DKFZp566L171_s1 586 (synonym: hfrd2) Homo sapiens cDNA clone DKFZp566L171 3'
3193	13118	22924	4.26	2.0E-26	X86694.1	NT	M.musculus mRNA for astrocytic phosphoprotein, PEA-15
8135	18023		2.88	2.0E-26	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
8549	18420	26990	4.55	2.0E-26	AI801412.1	EST_HUMAN	to89a01.x1 NCI_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2185416 3' similar to contains Alu repetitive element; contains element MER20 MER20 repetitive element;
8720	18537		1.82	2.0E-26	AF055086.1	NT	Homo sapiens MHC class 1 region
9252	18962		2.19	2.0E-26	AB037859.1	NT	Homo sapiens mRNA for KIAA1438 protein, partial cds
132	10106	19927	2.36	1.0E-26	BE170371.1	EST_HUMAN	QV4-HT0538-020300-123-a02 HT0538 Homo sapiens cDNA
2001	11894	21786	1.39	1.0E-26	AL039363.2	EST_HUMAN	DKFZp434H1910_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434H1910 5'
2516	12390	22282	0.84	1.0E-26	BE814995.1	EST_HUMAN	MR2-BN0114-240500-030-g07 BN0114 Homo sapiens cDNA
2654	12521		16.79	1.0E-26	AF261085.1	NT	Homo sapiens glyceraldehyde-3-phosphate dehydrogenase (GADPH) mRNA, complete cds

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6089	16034		2.75	1.0E-26	BE165980.1	EST_HUMAN	MR3-HT0487-150200-113-g01 HT0487 Homo sapiens cDNA
8206	18146		3.17	1.0E-26	AL038487.1	EST_HUMAN	DKFZp566C2146_r1 566 (synonym: htkd2) Homo sapiens cDNA clone DKFZp566C2146 5'
9493	19737		1.84	1.0E-26	H55093.1	EST_HUMAN	CHR220032 Chromosome 22 exon Homo sapiens cDNA clone C22_45 5'
7394	17342		3.11	9.0E-27	U93163.1	NT	Homo sapiens MAGE-B2 (MAGE-B2), MAGE-B3 (MAGE-B3), MAGE-B4 (MAGE-B4), and MAGE-B1 (MAGE-B1) genes, complete cds
8027	19470	28118	3.48	9.0E-27	P54296	SWISSPROT	MYOMESIN 2 (M-PROTEIN) (165 KD TITIN-ASSOCIATED PROTEIN) (165 KD CONNECTIN-ASSOCIATED PROTEIN)
9013	18812		3.97	9.0E-27	BF445556.1	EST_HUMAN	haa03c07.x1 NCI_CGAP_P128 Homo sapiens cDNA clone IMAGE:3253644 3' similar to contains OFR.t1 OFR repetitive element ;
10	9996	19787	3.09	8.0E-27	AI831492.1	EST_HUMAN	wj48c04.x1 NCI_CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2406150 3' similar to contains THR.b2 THR repetitive element ;
545	10486		4.13	8.0E-27	AL163227.2	NT	Homo sapiens chromosome 21 segment HS21C027
1395	11300	21158	18.87	8.0E-27	AW162737.1	EST_HUMAN	au87h08.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2783295 3' similar to gb:K00558 TUBULIN ALPHA-1 CHAIN (HUMAN);
1395	11300	21159	18.87	8.0E-27	AW162737.1	EST_HUMAN	au87h08.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2783295 3' similar to gb:K00558 TUBULIN ALPHA-1 CHAIN (HUMAN);
2121	12009	21909	0.98	8.0E-27	AW864776.1	EST_HUMAN	PM2-SN0018-220300-002-a07 SN0018 Homo sapiens cDNA
3148	13073	22874	3.31	8.0E-27	P12236	SWISSPROT	ADP,ATP CARRIER PROTEIN, LIVER ISOFORM T2 (ADP/ATP TRANSLOCASE 3) (ADENINE NUCLEOTIDE TRANSLOCATOR 3) (ANT 3)
3309	13230	23035	0.91	8.0E-27	AF181897.1	NT	Homo sapiens WRN (WRN) gene, complete cds
6165	15122		3.12	8.0E-27	BE928560.1	EST_HUMAN	MR4-BT0398-250800-204-d06 BT0398 Homo sapiens cDNA
6196	15956	26088	4	8.0E-27	N84970.1	EST_HUMAN	J1751F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA clone J1751 5' similar to REPETITIVE ELEMENT L1
7310	17186	27386	1.08	8.0E-27	AW857579.1	EST_HUMAN	CM1-CT0315-091299-063-d07 CT0315 Homo sapiens cDNA
7310	17186	27387	1.68	8.0E-27	AW857579.1	EST_HUMAN	CM1-CT0315-091299-063-d07 CT0315 Homo sapiens cDNA
668	10602		1.22	7.0E-27	Z70864.1	NT	Human endogenous retroviral element HC2
5023	14896		2.09	7.0E-27	AW629172.1	EST_HUMAN	hi51h12.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2976879 3' similar to TR:O76040 O76040 ORF2: FUNCTION UNKNOWN ;
8132	18020		4.22	7.0E-27	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
9631	19204		2.07	7.0E-27	AV723365.1	EST_HUMAN	AV723365 HTB Homo sapiens cDNA clone HTBAHE02 5'
8109	17989	28246	6.21	6.0E-27	M26697.1	NT	Human nucleolar protein (B23) mRNA, complete cds
7877	17727	27970	2.92	5.0E-27	BF666614.1	EST_HUMAN	602121491F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4278527 5'
7877	17727	27971	2.92	5.0E-27	BF666614.1	EST_HUMAN	602121491F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4278527 5'
6046	15949	26090	1.54	4.0E-27	9910569	NT	Mus musculus sperm tail associated protein (Slap), mRNA

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Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6656	16536		1.23	4.0E-27	AF078779.1	NT	Rattus norvegicus putative four repeat ion channel mRNA, complete cds
8880	18692	28985	2.56	4.0E-27	X89211.1	NT	H.sapiens DNA for endogenous retroviral like element
1995	11889	27182	5.42	3.0E-27	X60658.1	NT	R.rattus RYA3 mRNA for a potential ligand-binding protein
4174	14074	23849	1.27	3.0E-27	BE071924.1	EST_HUMAN	PMO-BT0527-090100-001-d11 BT0527 Homo sapiens cDNA
5278	15200	24976	5.13	3.0E-27	AA077705.1	EST_HUMAN	7B44C08 Chromosome 7 Fetal Brain cDNA Library Homo sapiens cDNA clone 7B44C08
7665	17343	27549	2.98	3.0E-27	BF035327.1	EST_HUMAN	601458531F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3862086 5'
36	10023	19820	7.96	2.0E-27	AF054187.1	NT	Homo sapiens alpha NAC mRNA, complete cds
1853	11749		18.58	2.0E-27	AA566345.1	EST_HUMAN	nk01b10.s1 NCL_CGAP_P111 Homo sapiens cDNA clone IMAGE:1000699 similar to gb:M17886 60S
3071	12998		10.27	2.0E-27	AW629172.1	EST_HUMAN	ACIDIC RIBOSOMAL PROTEIN P1 (HUMAN); hi51h12.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2975879 3' similar to TR:O76040 O76040 ORF2: FUNCTION UNKNOWN. ;
3187	13112	22916	1.43	2.0E-27	AF111167.2	NT	Homo sapiens jun dimerization protein gene, partial cds; cfos gene, complete cds; and unknown gene
3187	13112	22917	1.43	2.0E-27	AF111167.2	NT	Homo sapiens jun dimerization protein gene, partial cds; cfos gene, complete cds; and unknown gene
3944	13852	23627	1.09	2.0E-27	AF000368.1	NT	Rattus norvegicus voltage-gated sodium channel mRNA, complete cds
6712	16592	26790	1.5	2.0E-27	AI866347.1	EST_HUMAN	wl28g07.x1 NCL_CGAP_U11 Homo sapiens cDNA clone IMAGE:2426288 3'
7338	17206		2.3	2.0E-27	AA551527.1	EST_HUMAN	nf08h05.s1 NCL_CGAP_Thy1 Homo sapiens cDNA clone IMAGE:943737 similar to contains L1.L3 L1 repetitive element ;
7768	17618	27847	1.22	2.0E-27	M78590.1	EST_HUMAN	EST00738 Fetal brain, Stratagene (cat#936206) Homo sapiens cDNA clone HFBCF07
7768	17618	27848	1.22	2.0E-27	M78590.1	EST_HUMAN	EST00738 Fetal brain, Stratagene (cat#936206) Homo sapiens cDNA clone HFBCF07
8324	18201	28450	2.89	2.0E-27	AU121685.1	EST_HUMAN	AU121685 MAMMA1 Homo sapiens cDNA clone MAMMA1000746 5'
8778	11749		20.82	2.0E-27	AA565345.1	EST_HUMAN	nk01b10.s1 NCL_CGAP_P111 Homo sapiens cDNA clone IMAGE:1000699 similar to gb:M17886 60S
429	10374		1.56	1.0E-27	AL163246.2	NT	ACIDIC RIBOSOMAL PROTEIN P1 (HUMAN); Homo sapiens chromosome 21 segment HS21C046
980	10903	20749	1.41	1.0E-27	AB026898.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
5943	15648	25972	6.31	1.0E-27	6005855	NT	Homo sapiens Retina-derived POU-domain factor-1 (RPF-1), mRNA
6105	15999	26136	2.2	1.0E-27	F30158.1	EST_HUMAN	HSPD20461 HM3 Homo sapiens cDNA clone s4000095C10
6105	15999	26137	2.2	1.0E-27	F30158.1	EST_HUMAN	HSPD20461 HM3 Homo sapiens cDNA clone s4000095C10
7005	16682	27075	1.72	1.0E-27	AB007923.1	NT	Homo sapiens mRNA for KIAA0454 protein, partial cds
7194	17071		1.89	1.0E-27	BE079790.1	EST_HUMAN	RC6-BT0627-140200-011-E06 BT0627 Homo sapiens cDNA
7606	17457	27672	2.68	1.0E-27	D87449.1	NT	Human mRNA for KIAA0260 gene, partial cds
8943	18751	29046	3.14	1.0E-27	AF111093.1	NT	Bos taurus latrophilin 3 splice variant bbah mRNA, complete cds

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Table 4
Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
136	10109		2.32	9.0E-28	BE348399.1	EST_HUMAN	hwi7t11.x1 NCL CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3183188 3' similar to TR:Q07314 Q07314
308	10270	20089	3.01	9.0E-28	AU126260.1	EST_HUMAN	SECRETED NEUREXIN III-ALPHA-C PRECURSOR, [3] TR:Q07280 TR:Q07313 ;
5118	14986	24760	1.21	9.0E-28	AI590115.1	EST_HUMAN	AU126260 NT2RP1 Homo sapiens cDNA clone NT2RP1000443 5'
5118	14986	24761	1.21	9.0E-28	AI590115.1	EST_HUMAN	to12b09.x1 NCL CGAP_U12 Homo sapiens cDNA clone IMAGE:2178809 3' similar to contains OFR.t1 OFR
9093	18866		3.74	9.0E-28	BF377859.1	EST_HUMAN	repetitive element ;
9418	19592		1.97	8.0E-28	AW157571.1	EST_HUMAN	repetitive element ;
1164	11077	20922	7.54	7.0E-28	AU142750.1	EST_HUMAN	CM2-TN0140-070900-372-g01 TN0140 Homo sapiens cDNA
8523	18395	28660	2.54	7.0E-28	11417866	NT	au83h08.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2782911 3' similar to
9053	18336		1.44	7.0E-28	AV735348.1	EST_HUMAN	TR:O60302 O60302 KIAA0555 PROTEIN ; contains element MER22 repetitive element ;
3987	13994	23670	1.27	6.0E-28	AB020673.1	NT	AU142750 Y79AA1 Homo sapiens cDNA clone Y79AA1000824 5'
3987	13994	23671	1.27	6.0E-28	AB020673.1	NT	Homo sapiens gamma-glutamyltransferase-like activity 1 (GGTLA1), mRNA
9673	19232		2.73	6.0E-28	AA504562.1	EST_HUMAN	AV735348 CB Homo sapiens cDNA clone CBFACA12 5'
315	10277		3.08	5.0E-28	AI921003.1	EST_HUMAN	Homo sapiens mRNA for KIAA0866 protein, complete cds
3927	13836	23616	1.85	5.0E-28	R79782.1	EST_HUMAN	Homo sapiens mRNA for KIAA0866 protein, complete cds
2584	12455	22347	1.42	4.0E-28	AW195066.1	EST_HUMAN	ae00e03.r1 NCL CGAP_GCB1 Homo sapiens cDNA clone IMAGE:826340 5' similar to contains Alu
3070	12997	22798	3.39	4.0E-28	BE409100.1	EST_HUMAN	repetitive element; contains element PTR5 repetitive element ;
6336	16199	26359	1.59	4.0E-28	AI198941.1	EST_HUMAN	wo18c07.x1 NCL CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2455692 3' similar to contains THR.b1
8239	18119		4.29	4.0E-28	AF029308.1	NT	y89f10.r1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:146443 5'
8371	18248		53.6	4.0E-28	AB038241.1	NT	xn33c09.x1 NCL CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2695504 3' similar to SW:GG95_HUMAN
8388	16199	26359	2.94	4.0E-28	AI198941.1	EST_HUMAN	Q08379 GOLGIN-95 ;
1262	11169		1.89	3.0E-28	AF155382.1	NT	601300703F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3636305 5'
7124	17001	27193	2.19	3.0E-28	BF354030.1	EST_HUMAN	qf66f10.x1 Soares testis NHT Homo sapiens cDNA clone IMAGE:1755019 3' similar to gb:M19503 LINE-1
8306	18183	28430	1.84	3.0E-28	U53588.1	NT	REVERSE TRANSCRIPTASE HOMOLOG (HUMAN);
							qf66f10.x1 Soares testis NHT Homo sapiens cDNA clone IMAGE:1755019 3' similar to gb:M19503 LINE-1
							REVERSE TRANSCRIPTASE HOMOLOG (HUMAN);
							Homo sapiens metallopeptidase-like, disintegrin-like, cysteine-rich protein 2 epsilon (ADAM22) mRNA,
							complete cds
							MR3-HT0713-280500-013-f09 HT0713 Homo sapiens cDNA
							Homo sapiens MHC class 1 region

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9489	19106		2.44	3.0E-28	AI831991.1	EST_HUMAN	wj9807.x1 NCL_CGAP_Lym12 Homo sapiens cDNA clone IMAGE:2410885 3' similar to contains Alu repetitive element; contains element HGR repetitive element ;
83	10067	19884	6.45	2.0E-28	BE062167.1	EST_HUMAN	RC1-BT0254-220300-019-c05 BT0254 Homo sapiens cDNA
1149	11062	20905	10	2.0E-28	Y11107.3	NT	Homo sapiens ITGB4 gene for integrin beta 4 subunit, exons 3-41
2427	12304	22200	2.1	2.0E-28	AI348634.1	EST_HUMAN	q035b06.x1 NCL_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1910483 3' similar to contains L1.b2 L1 repetitive element ;
5821	15727		4.28	2.0E-28	BF212905.1	EST_HUMAN	601814196F1 NIH_MGC_54 Homo sapiens cDNA clone IMAGE:4048751 5'
7528	17379		5.86	2.0E-28	AW972305.1	EST_HUMAN	EST384394 IMAGE resequences, MAGL Homo sapiens cDNA
8887	18698	28992	2.27	2.0E-28	AF224669.1	NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
1463	11368	21233	2.42	1.0E-28	D36044.1	NT	Human gene for Ah-receptor, exon 7-9
2173	12060	21963	1.55	1.0E-28	BF333236.1	EST_HUMAN	QV1-BT0821-120900-360-b03 BT0821 Homo sapiens cDNA
2650	12517	22407	1.03	1.0E-28	AF000995.1	NT	Homo sapiens ubiquitous TPR motif, Y isoform (UTY) mRNA, alternative transcript 2, complete cds
6887	16467		4.48	1.0E-28	11429885	NT	Homo sapiens similar to ribosomal protein L12 (H. sapiens) (LOC630391), mRNA
6675	16555		3.02	1.0E-28	8922793	NT	Homo sapiens hypothetical protein FLJ10998 (FLJ10998), mRNA
7946	17214	27413	2.93	1.0E-28	AA308744.1	EST_HUMAN	EST179615 HCC cell line (metastasis to liver in mouse) II Homo sapiens cDNA 5' end similar to similar to retroviral LTR
7678	17528	27753	5.15	1.0E-28	4758431	NT	Homo sapiens gamma-glutamyltransferase-like activity 1 (GGT1A1), mRNA
7678	17528	27754	5.15	1.0E-28	4758431	NT	Homo sapiens gamma-glutamyltransferase-like activity 1 (GGT1A1), mRNA
9058	18840		3.95	1.0E-28	AA054182.1	EST_HUMAN	z51c01.r1 Soares retina N2b4-HR Homo sapiens cDNA clone IMAGE:380448 5'
9797	19485		1.43	1.0E-28	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
9892	19691	24896	2.6	9.0E-29	AW663987.1	EST_HUMAN	hi76g06.x1 Soares NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2978266 3'
9585	19169		2.92	8.0E-29	Q00130	SWISSPROT	HYPOTHETICAL GENE 50 PROTEIN
1584	11488	21349	0.91	7.0E-29	AW966447.1	EST_HUMAN	EST378521 IMAGE resequences, MAGI Homo sapiens cDNA
9942	19410		5.08	7.0E-29	AJ132352.1	NT	Rattus norvegicus mRNA for 45 kDa secretory protein, partial
580	10518	20325	6.52	6.0E-29	AI936748.1	EST_HUMAN	wp69b01.x1 NCL_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2468985 3' similar to TR:O15475
9353	19028		3.88	6.0E-29	BE940436.1	EST_HUMAN	O15475 UNNAMED HERV-H PROTEIN ; contains LTR7.b1 LTR7 repetitive element ;
9438	19078		1.86	6.0E-29	BF568097.1	EST_HUMAN	RC3-UT0062-210800-021-c05 UT0062 Homo sapiens cDNA
4928	14807		0.98	5.0E-29	AL163203.2	NT	602184092F1 NIH_MGC_42 Homo sapiens cDNA clone IMAGE:4300079 5'
7068	18945		7.61	5.0E-29	AW887541.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C003
						EST_HUMAN	RC3-OT0091-170300-011-c12 OT0091 Homo sapiens cDNA
3194	13119		1.68	4.0E-29	AI752367.1	EST_HUMAN	cn15c02.x1 Normal Human Trabecular Bone Cells Homo sapiens cDNA clone NHTBC_cn15c02 random
5656	15568		6.65	4.0E-29	BE164930.1	EST_HUMAN	QV1-HT0471-280300-121-a05 HT0471 Homo sapiens cDNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7079	16956	27149	4.71	4.0E-29	J04988.1	NT	Human 90 kD heat shock protein gene, complete cds
4317	14214	23997	1.45	3.0E-29	AB042297.1	NT	Homo sapiens PTS gene for 6-pyruvyltetrahydropterin synthase, complete cds
4626	14514	24305	1.31	3.0E-29	BF333236.1	EST_HUMAN	QV1-BT0821-120900-360-b03 BT0821 Homo sapiens cDNA
7070	16947	27138	2.07	3.0E-29	D38044.1	NT	Human gene for Ah-receptor, exon 7-9
7362	17229	27429	1.6	3.0E-29	AW303317.1	EST_HUMAN	xv17f03.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2813405 3' similar to contains Alu repetitive element; contains MER19.12 MER19 repetitive element ;
7492	17362		1.64	3.0E-29	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
8591	18459	28728	2.22	3.0E-29	AA403053.1	EST_HUMAN	z62b01.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:726889 5' similar to TR:G1335769
9248	18959		1.51	3.0E-29	D63882.1	NT	Human HsLIM15 mRNA for HsLIM15, complete cds
484	10427	20240	1.43	2.0E-29	AF084869.1	NT	Homo sapiens envelope protein RIC-6 (env) gene, complete cds
484	10427	20241	1.43	2.0E-29	AF084869.1	NT	Homo sapiens envelope protein RIC-6 (env) gene, complete cds
1516	11421	21278	6.12	2.0E-29	AI963604.1	EST_HUMAN	wr65d10.x1 NCL CGAP_U1 Homo sapiens cDNA clone IMAGE:2492563 3' similar to TR:O15546 O15546 HERV-E ENVELOPE GLYCOPROTEIN ;
1516	11421	21279	6.12	2.0E-29	AI963604.1	EST_HUMAN	wr65d10.x1 NCL CGAP_U1 Homo sapiens cDNA clone IMAGE:2492563 3' similar to TR:O15546 O15546 HERV-E ENVELOPE GLYCOPROTEIN ;
4182	14082	23855	2.03	2.0E-29	AL163208.2	NT	Homo sapiens chromosome 21 segment HS21C068
5750	15658	25765	1.43	2.0E-29	AI806418.1	EST_HUMAN	w27g07.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2356860 3' similar to contains element MER6 repetitive element ;
6461	15658	25765	1.43	2.0E-29	AI806418.1	EST_HUMAN	w27g07.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2356860 3' similar to contains element MER6 repetitive element ;
7474	17334	27539	2.95	2.0E-29	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
7474	17334	27540	2.95	2.0E-29	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
7870	17729	27973	3.39	2.0E-29	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
7879	17729	27974	3.39	2.0E-29	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
8804	18618		1.96	2.0E-29	AW880701.1	EST_HUMAN	QV0-OT0032-080300-156-d01 OT0032 Homo sapiens cDNA
9004	18807		1.73	2.0E-29	AL163227.2	NT	Homo sapiens chromosome 21 segment HS21C027
7105	16982	27174	5.41	1.0E-29	AW983880.1	EST_HUMAN	RC1-HN0003-220300-021-b04 HN0003 Homo sapiens cDNA
5966	15871	25995	3.04	9.0E-30	AA761215.1	EST_HUMAN	nz20c07.s1 NCL CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1288332 3' similar to contains MER4.b1
9132	18889		1.5	9.0E-30	11422745	NT	MER4 repetitive element ;
5815	15721		8.81	8.0E-30	F08688.1	EST_HUMAN	Homo sapiens zinc finger regulated transporter-like (ZIRTL), mRNA
6812	16691	26880	3.37	8.0E-30	AA383873.1	EST_HUMAN	HSC23F051 normalized infant brain cDNA Homo sapiens cDNA clone c-23f05
7039	16916	27105	3.53	8.0E-30	AI657072.1	EST_HUMAN	EST97317 Thymus 1 Homo sapiens cDNA 5' end similar to EST containing O family repeat
							PT2.1_13_B11.tumor2 Homo sapiens cDNA 3'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1499	11403		1.16	7.0E-30	BE091133.1	EST_HUMAN	PM4-BT0724-150400-004-d11 BT0724 Homo sapiens cDNA
1549	11454		0.95	6.0E-30	X51755.1	NT	Human lambda-immunoglobulin constant region complex (germline)
1736	11637	21505	1.26	6.0E-30	D25303.1	NT	Human mRNA for integrin alpha subunit, complete cds
3153	13078	22878	2.41	6.0E-30	BE080826.1	EST_HUMAN	QV0-BN0147-290400-214-f12 BN0147 Homo sapiens cDNA
9915	11454		3.15	6.0E-30	X51755.1	NT	Human lambda-immunoglobulin constant region complex (germline)
3931	13840	23620	31.23	5.0E-30	AJ399992.1	EST_HUMAN	tg92g03.x1 NCI CGAP CLL1 Homo sapiens cDNA clone IMAGE:2116276 3' similar to contains Alu repetitive element;
5205	19522		7.35	5.0E-30	U87931.1	NT	Human aconitase hydratase (ACO2) gene, exon 7
8261	18141		3.55	6.0E-30	AL163278.2	NT	Homo sapiens chromosome 21 segment HS21C078
8495	18368	28632	6.68	5.0E-30	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
8495	18368	28633	6.68	5.0E-30	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
2096	11985	21880	1.64	4.0E-30	AW937471.1	EST_HUMAN	QV3-DT0043-090200-080-c06 DT0043 Homo sapiens cDNA
2096	11985	21881	1.64	4.0E-30	AW937471.1	EST_HUMAN	QV3-DT0043-090200-080-c06 DT0043 Homo sapiens cDNA
7162	17039	27231	1.49	4.0E-30	AW812488.1	EST_HUMAN	GM1-S10181-091199-035-f08 ST0181 Homo sapiens cDNA
1134	11048		1.71	3.0E-30	AJ338551.1	EST_HUMAN	qq93c05.x1 Soares total_fetus Nb2HF8_9w Homo sapiens cDNA clone IMAGE:1938920 3' similar to contains MER29.b2 MER29 repetitive element;
3697	13611	23395	0.91	3.0E-30	AF128893.1	NT	Homo sapiens telomerase reverse transcriptase (TERT) gene, exons 1-6
8538	18410	28675	2.38	3.0E-30	P34056	SWISSPROT	TRANSCRIPTION FACTOR AP-2
659	10593	20411	1.18	2.0E-30	AW857315.1	EST_HUMAN	GM0-CT0307-310100-158-h03 CT0307 Homo sapiens cDNA
1068	10984		2.32	2.0E-30	F08688.1	EST_HUMAN	HSC23F051 normalized infant brain cDNA Homo sapiens cDNA clone c-23f05
1464	11369	21234	5.91	2.0E-30	BE175877.1	EST_HUMAN	RC5-HT0882-110400-013-H08 HT0582 Homo sapiens cDNA
2683	12548	22438	10.97	2.0E-30	BE765232.1	EST_HUMAN	IL2-NT0101-280700-116-E04 NT0101 Homo sapiens cDNA
2889	12816	22609	6.38	2.0E-30	AF114156.1	NT	Homo sapiens Y-linked zinc finger protein (ZFY) gene, complete cds
3721	13633	23419	2.11	2.0E-30	AW206581.1	EST_HUMAN	UH-HB1'-af0-o-12-o-UI.s1 NCI CGAP Sub3 Homo sapiens cDNA clone IMAGE:2722558 3'
4668	14554	24346	1.72	2.0E-30	BE298945.1	EST_HUMAN	601119860F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3029438 5'
4668	14554	24347	1.72	2.0E-30	BE298945.1	EST_HUMAN	601119860F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3029438 5'
6966	16844	27036	3.46	2.0E-30	C18939.1	EST_HUMAN	C18939 Human placenta cDNA (TFujiwara) Homo sapiens cDNA clone GEN-570C01 5'
7019	16896	27085	1.55	2.0E-30	BE670617.1	EST_HUMAN	7e37c12.x1 NCI CGAP Lu24 Homo sapiens cDNA clone IMAGE:3284862 3' similar to SW:DHSA_HUMAN P31040 SUCCINATE DEHYDROGENASE [UBIQUINONE] FLAVOPROTEIN SUBUNIT PRECURSOR;
7019	16896	27086	1.55	2.0E-30	BE670617.1	EST_HUMAN	7e37c12.x1 NCI CGAP Lu24 Homo sapiens cDNA clone IMAGE:3284862 3' similar to SW:DHSA_HUMAN P31040 SUCCINATE DEHYDROGENASE [UBIQUINONE] FLAVOPROTEIN SUBUNIT PRECURSOR;
7743	17593	27814	3.3	2.0E-30	AW971568.1	EST_HUMAN	EST383657 IMAGE:resequences, MAGL Homo sapiens cDNA

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Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7802	17652	27689	4.47	2.0E-30	AW470791.1	EST_HUMAN	h333d06.x1 NCI_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2875499 3' similar to contains THR.b3 T-IR repetitive element ;
284	10249	20069	10.22	1.0E-30	C18939.1	EST_HUMAN	C18939 Human placenta cDNA (Tfujivara) Homo sapiens cDNA clone GEN:570C01 5'
527	10469	20281	1.6	1.0E-30	AW468897.1	EST_HUMAN	h330b04.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2910991 3' similar to contains MER1.3 MER1 MER1 repetitive element ;
699	10632	20457	2.92	1.0E-30	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
2165	12052	21953	3.24	1.0E-30	AA664377.1	EST_HUMAN	ac77b08.s1 Stralagene lung (#937210) Homo sapiens cDNA clone IMAGE:868599 3'
2413	12290	22187	2.57	1.0E-30	BF347728.1	EST_HUMAN	902022560F1 NCI_CGAP_Brin67 Homo sapiens cDNA clone IMAGE:4157991 5'
2973	12900	22699	1.03	1.0E-30	5803091	NT	Homo sapiens methionine aminopeptidase; eIF-2-associated p67 (MNPEP), mRNA
3015	12943	22736	0.93	1.0E-30	AA315045.1	EST_HUMAN	EST186868 HCC cell line (metastasis to liver in mouse) II Homo sapiens cDNA 5' end
6545	16403	26582	2.32	1.0E-30	BF189230.1	EST_HUMAN	601806932F1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:4040694 5'
9733	19615		5.1	1.0E-30	H55593.1	EST_HUMAN	CHR220532 Chromosome 22 exon Homo sapiens cDNA clone C22_728 5'
7013	16890		2.04	9.0E-31	Z38293.1	EST_HUMAN	HSC05F032 normalized infant brain cDNA Homo sapiens cDNA clone c-05f03 3'
1060	10977	20820	1.64	8.0E-31	8923389	NT	Homo sapiens hypothetical protein FLJ20420 (FLJ20420), mRNA
2362	12242		5.14	8.0E-31	AL163208.2	NT	Homo sapiens chromosome 21 segment HS21C008
694	10627		1.72	7.0E-31	AA372637.1	EST_HUMAN	EST84555 Colon adenocarcinoma IV Homo sapiens cDNA 5' end
2633	12500	22392	1.7	7.0E-31	BE326517.1	EST_HUMAN	hw05a11.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3182012 3'
2633	12500	22393	1.7	7.0E-31	BE326517.1	EST_HUMAN	hw05a11.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3182012 3'
9583	19168	25272	2.56	7.0E-31	X51755.1	NT	Human lambda-immunoglobulin constant region complex (germline)
3625	13539		2.79	6.0E-31	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
6739	16618		3.68	6.0E-31	AF055066.1	NT	Homo sapiens MHC class 1 region
8120	18008	28255	2.11	6.0E-31	AU119105.1	EST_HUMAN	AU119105 HEMBA1 Homo sapiens cDNA clone HEMBA1005050 5'
9191	18926	25351	1.88	6.0E-31	AW372868.1	EST_HUMAN	RC5-BT0377-091299-031-D12 BT0377 Homo sapiens cDNA
9319	19541		1.78	6.0E-31	BE894488.1	EST_HUMAN	601433087F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3918524 5'
185	10157	19973	2.85	5.0E-31	M60694.1	NT	Homo sapiens type I DNA topoisomerase gene, exon 8
185	10157	19974	2.85	5.0E-31	M60694.1	NT	Homo sapiens type I DNA topoisomerase gene, exon 8
6915	16793		1.21	5.0E-31	BF056540.1	EST_HUMAN	7k06f04.x1 NCI_CGAP_GC6 Homo sapiens cDNA clone IMAGE:3443479 3' similar to TR:Q13537 Q13537 SIMILAR TO POGO ELEMENT ; contains L1.1 L1 repetitive element ;
551	10519		3.78	4.0E-31	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
1594	11498	21357	1.04	4.0E-31	Q10473	SWISSPROT	POLYPEPTIDE N-ACETYL GALACTOSAMINYLTRANSFERASE (PROTEIN-UDP ACETYL GALACTOSAMINYLTRANSFERASE) (UDP-GALNAc:POLYPEPTIDE, N- ACETYL GALACTOSAMINYLTRANSFERASE) (GALNAc-T1)
1775	11674		2.59	4.0E-31	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2759	12621		1.38	4.0E-31	5730038	NT	Homo sapiens SET domain and mariner transposase fusion gene (SETMAR) mRNA
9604	19180		1.52	4.0E-31	11430273	NT	Homo sapiens KIAA0569 gene product (KIAA0569), mRNA
9718	19259		1.38	4.0E-31	AB008881.1	NT	Homo sapiens gene for activin receptor type IIB, complete cds
2550	12423	22314	1.42	3.0E-31	6005871	NT	Homo sapiens SEC63, endoplasmic reticulum translocon component (S. cerevisiae) like (SEC63L), mRNA
6341	16204	26366	9.03	3.0E-31	4826853	NT	Homo sapiens NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 8 (19kD, AS-H) (NDUFB8) mRNA
6425	16286	26448	1.38	3.0E-31	11420329	NT	Homo sapiens hypothetical protein FLJ10842 (FLJ10842), mRNA
6745	16624		1.95	3.0E-31	AL163206.2	NT	Homo sapiens chromosome 21 segment HS21C006
7525	17376	27585	2.86	3.0E-31	D14523.1	NT	Horse mRNA for ferritin L-chain, complete cds
8028	17920	28167	2.01	3.0E-31	P11174	SWISSPROT	40S RIBOSOMAL PROTEIN S15 (RIG PROTEIN)
8493	18366		6.36	3.0E-31	BF035327.1	EST_HUMAN	601458531F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3862086 5'
1875	11771	21647	1.83	2.0E-31	AW838171.1	EST_HUMAN	QV2-LT0051-260300-111-703 LT0051 Homo sapiens cDNA
2167	12054	21955	1.31	2.0E-31	A1933388.1	EST_HUMAN	tg44g05.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2111672 3'
2292	12174	22074	2.18	2.0E-31	AL119245.1	EST_HUMAN	DKFZp761G1513_r1 761 (synonym: hamy2) Homo sapiens cDNA clone DKFZp761G1513 5'
2391	12269	22164	4.4	2.0E-31	AA458824.1	EST_HUMAN	aa88f11.s1 Stragene fetal retina 937202 Homo sapiens cDNA clone IMAGE:838413 3' similar to contains THR.12 THR repetitive element;
5502	15421	25483	3.6	2.0E-31	BE350127.1	EST_HUMAN	h109g01.x1 NCL_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3146256 3' similar to contains MER29.b3 MER29 repetitive element;
7246	17123		1.8	2.0E-31	AA877764.1	EST_HUMAN	n08f04.s1 NCL_CGAP_Co10 Homo sapiens cDNA clone IMAGE:1161055 3' similar to TR:Q13537 Q13537 MER37 TRANSPORTABLE ELEMENT, COMPLETE CONSENSUS SEQUENCE.;
7309	17185	27385	3.99	2.0E-31	7661535	NT	Homo sapiens B9 protein (B9), mRNA
7700	17550	27774	1.27	2.0E-31	AV710948.1	EST_HUMAN	AV710948 Cu Homo sapiens cDNA clone CuAALB07 5'
7700	17560	27775	1.27	2.0E-31	AV710948.1	EST_HUMAN	AV710948 Cu Homo sapiens cDNA clone CuAALB07 5'
7797	17647	27863	2.17	2.0E-31	BE408611.1	EST_HUMAN	601304125F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3638310 5'
7797	17647	27884	2.17	2.0E-31	BE408611.1	EST_HUMAN	601304125F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3638310 5'
9292	18993		2	2.0E-31	AF148512.1	NT	Homo sapiens hexokinase II gene, promoter region
9431	19759		1.81	2.0E-31	A1114527.1	EST_HUMAN	HA1110 Human fetal liver cDNA library Homo sapiens cDNA
16	10002	19794	8.34	1.0E-31	U93163.1	NT	Homo sapiens IMAGE-B2 (IMAGE-B2), IMAGE-B3 (IMAGE-B3), IMAGE-B4 (IMAGE-B4), and IMAGE-B1 (IMAGE-B1) genes, complete cds
1640	11544	21403	2	1.0E-31	O95371	SWISSPROT	OLFACTORY RECEPTOR 2C1
1640	11544	21404	2	1.0E-31	O95371	SWISSPROT	OLFACTORY RECEPTOR 2C1
1640	11544	21405	2	1.0E-31	O95371	SWISSPROT	OLFACTORY RECEPTOR 2C1
4535	14428	24209	1.01	1.0E-31	AL134376.1	EST_HUMAN	DKFZp547B235_r1 547 (synonym: hfb17) Homo sapiens cDNA clone DKFZp547B235 5'

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Table 4
Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4535	14428	24210	1.01	1.0E-31	AL134376.1	EST_HUMAN	DKFp647B235_r1 647 (synonym: hbr1) Homo sapiens cDNA clone DKFp647B235 5'
5235	15159	24927	3.15	1.0E-31	AW391679.1	EST_HUMAN	MR3-ST0220-151299-028-a09_1 ST0220 Homo sapiens cDNA
5728	15635	25738	1.87	1.0E-31	AF048727.1	NT	Homo sapiens minisatellite ceb1 repeat region
8288	18167	28411	2.72	1.0E-31	AI089434.1	EST_HUMAN	qf21h03.x1 NCL CGAP_Brn25 Homo sapiens cDNA clone IMAGE:1750709 3' similar to TR-Q16595
2835	12763		0.99	9.0E-32	U50871.1	NT	Human familial Alzheimer's disease (STM2) gene, complete cds
6000	15605	26029	2.34	9.0E-32	AV723976.1	EST_HUMAN	AV723976 HTB Homo sapiens cDNA clone HTBAAG01 5'
2032	11923	21815	3.32	8.0E-32	AI056770.1	EST_HUMAN	oz15a09.x1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:1675384 3'
4754	14639	24426	1.17	7.0E-32	P52591	SWISSPROT	NUCLEAR ENVELOPE PORE MEMBRANE PROTEIN POM 121 (PORE MEMBRANE PROTEIN OF 121 KD) (P145)
9288	18972		2.77	7.0E-32	X17283.1	NT	Human chromosome 22 immunoglobulin V(k) gene, part with 5' breakpoint between orphion and neighbouring non-amplified region
2702	12566	22456	0.9	6.0E-32	AI478104.1	EST_HUMAN	hm34a10.x1 NCL CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2159994 3' similar to contains MER29.f3
6359	16222		1.5	6.0E-32	BE88016.1	EST_HUMAN	MER29 repetitive element;
1018	10936	20779	29.57	5.0E-32	AF116927.1	NT	601511530F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913087 5'
915	10839		1.74	4.0E-32	AL163246.2	NT	Homo sapiens PRO1181 mRNA, complete cds
6484	16342	26510	2.82	4.0E-32	11432574	NT	Homo sapiens chromosome 21 segment HS21C046
6484	16342	26511	2.82	4.0E-32	11432574	NT	Homo sapiens AT-binding transcription factor 1 (ATBF1), mRNA
448	10392	20213	3.4	3.0E-32	Y17293.1	NT	Homo sapiens AT-binding transcription factor 1 (ATBF1), mRNA
1438	11343	21210	7.67	3.0E-32	AV731500.1	EST_HUMAN	Homo sapiens FLI-1 gene, partial
7404	17271	27477	6.73	3.0E-32	AV758634.1	EST_HUMAN	AV731500 HTF Homo sapiens cDNA clone HTFAK07 5'
7404	17271	27478	6.73	3.0E-32	AV758634.1	EST_HUMAN	AV758634 BM Homo sapiens cDNA clone BMFBBH12 5'
							AV758634 BM Homo sapiens cDNA clone BMFBBH12 5'
							z95a07.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:448500 3' similar to contains THR.f3 THR repetitive element;
8297	18176	28421	8.08	3.0E-32	AA777621.1	EST_HUMAN	601156235F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3139701 5'
9294	18995		3.04	3.0E-32	BE279086.1	EST_HUMAN	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (t(11q24) translocation); translocated to, 4 (MLLT4) mRNA
9655	15090	24882	2.43	3.0E-32	5174574	NT	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (t(11q24) translocation); translocated to, 4 (MLLT4) mRNA
9655	15090	24883	2.43	3.0E-32	5174574	NT	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (t(11q24) translocation); translocated to, 4 (MLLT4) mRNA
9802	19314		4.94	3.0E-32	BE279086.1	EST_HUMAN	601156235F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3139701 5'
4783	14667	24454	0.91	2.0E-32	BE296813.1	EST_HUMAN	601173631F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3529159 5'
5900	15806	25629	19.01	2.0E-32	Z38133.1	NT	H.sapiens mRNA for myosin
5900	15806	25630	19.01	2.0E-32	Z38133.1	NT	H.sapiens mRNA for myosin

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6815	16694	26884	3.41	2.0E-32	AA114294.1	EST_HUMAN	zn66c08.r1 Stratiogene HeLa cell s3 937216 Homo sapiens cDNA clone IMAGE:563150 5'
6815	16694	26885	3.41	2.0E-32	AA114294.1	EST_HUMAN	zn66c08.r1 Stratiogene HeLa cell s3 937216 Homo sapiens cDNA clone IMAGE:563150 5'
9908	19385	25175	1.61	2.0E-32	AV736449.1	EST_HUMAN	AV736449 CB Homo sapiens cDNA clone CBFBI08 5'
9908	19385	25176	1.61	2.0E-32	AV736449.1	EST_HUMAN	AV736449 CB Homo sapiens cDNA clone CBFBI08 5'
3055	12982		1.06	1.0E-32	BE743299.1	EST_HUMAN	601573207F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3834433 5'
6198	15958	26090	7.04	1.0E-32	11439789	NT	Homo sapiens chromosome 11 open reading frame 9 (C11ORF9), mRNA
6997	16874	27065	5.18	1.0E-32	AA720574.1	EST_HUMAN	hw21g02.s1 NCI_CGAP_GCB0 Homo sapiens cDNA clone IMAGE:1241138 3' similar to contains THR.t3 THR repetitive element;
3435	13352		4.98	9.0E-33	BE327112.1	EST_HUMAN	hw07c05.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3182216 3' similar to TR:O88539 O88539 WW DOMAIN BINDING PROTEIN 11.;
5867	15773		4.19	9.0E-33	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
7103	16980	27172	1.99	9.0E-33	BF347229.1	EST_HUMAN	602021164F1 NCI_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4156670 5'
8177	18065		5.89	9.0E-33	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
54	10041	19850	2.06	7.0E-33	5031736	NT	Homo sapiens short-chain alcohol dehydrogenase family member (HEP27) mRNA
54	10041	19851	2.06	7.0E-33	5031736	NT	Homo sapiens short-chain alcohol dehydrogenase family member (HEP27) mRNA
2115	12004	21902	2.71	7.0E-33	AI590115.1	EST_HUMAN	to12b09.x1 NCI_CGAP_U42 Homo sapiens cDNA clone IMAGE:2178809 3' similar to contains OFR.t1 OFR repetitive element;
2612	12480		8.4	7.0E-33	AV730056.1	EST_HUMAN	AV730056 HTF Homo sapiens cDNA clone HTFAVE06 5'
2800	11573	21439	1.78	7.0E-33	AV730015.1	EST_HUMAN	AV730015 HTF Homo sapiens cDNA clone HTFANF08 5'
3204	13128		12.85	7.0E-33	AW971307.1	EST_HUMAN	EST383398 MAGL Homo sapiens cDNA resequences, MAGL Homo sapiens cDNA
8203	18087	28338	3.9	7.0E-33	BF347229.1	EST_HUMAN	602021164F1 NCI_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4156670 5'
8573	18441	28709	2.15	7.0E-33	AW971588.1	EST_HUMAN	EST383367 MAGL Homo sapiens cDNA resequences, MAGL Homo sapiens cDNA
9274	18978	25322	3.43	7.0E-33	AA601416.1	EST_HUMAN	no16h01.s1 NCI_CGAP_Phe1 Homo sapiens cDNA clone IMAGE:1100881 3' similar to contains L1.t1 L1 repetitive element;
3676	13590		0.85	6.0E-33	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
6998	16865	27059	13.52	6.0E-33	J04038.1	NT	Homo glyceraldehyde-3-phosphate dehydrogenase (GAPDH) gene, complete cds
7049	16926	27117	2.57	6.0E-33	11429198	NT	Homo sapiens similar to RAP23 (S. cerevisiae) homolog B (H. sapiens) (LOC632277), mRNA
7750	17600	27822	1.24	6.0E-33	6755609	NT	Mus musculus SRY-box containing gene 6 (Sox6), mRNA
7750	17600	27823	1.24	6.0E-33	6755609	NT	Mus musculus SRY-box containing gene 6 (Sox6), mRNA
1799	11640		1.78	5.0E-33	BF373515.1	EST_HUMAN	QV1-FT0169-100700-271-a02 FT0169 Homo sapiens cDNA
1838	11735		1.18	5.0E-33	11141884	NT	Homo sapiens solute carrier family 5 (choline transporter), member 7 (SLC9A7), mRNA
1856	11752	21626	1.37	5.0E-33	4507208	NT	Homo sapiens spermidine synthase (SRM) mRNA
1856	11752	21627	1.37	5.0E-33	4507208	NT	Homo sapiens spermidine synthase (SRM) mRNA

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Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2226	12111		1.3	5.0E-33	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
9082	18858		1.62	5.0E-33	11433063	NT	Homo sapiens ubiquitin protein ligase E3A (human papilloma virus E6-associated protein, Angelman syndrome) (UBE3A), mRNA
1112	11027		3.28	4.0E-33	AL163207.2	NT	Homo sapiens chromosome 21 segment HS21C007
2078	11968	21861	1.77	4.0E-33	4758987	NT	Homo sapiens RAB1, member RAS oncogene family (RAB1) mRNA
2370	12250		7.39	4.0E-33	AA628621.1	EST_HUMAN	ab51b11.1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone IMAGE:844317 5' similar to contains Alu repetitive element; contains MER28.b2 MER28 repetitive element;
2498	12373	22265	3.77	4.0E-33	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
4382	14278	24057	1.63	4.0E-33	AW293349.1	EST_HUMAN	UI-H-B12-ah1-c-03-0-UI.s1 NCI_CGAP_Sub4 Homo sapiens cDNA clone IMAGE:2727149 3'
5318	15239	25043	20.94	4.0E-33	AA053053.1	EST_HUMAN	z171a08.r1 Stratagene colon (#937204) Homo sapiens cDNA clone IMAGE:510038 5' similar to gb:XM12671.mn1 HETEROGENEOUS NUCLEAR RIBONUCLEOPROTEIN A1 (HUMAN);
9007	18810	29102	1.72	4.0E-33	11425635	NT	Homo sapiens killer cell immunoglobulin-like receptor, three domains, long cytoplasmic tail, 1 (KIR3DL1), mRNA
1073	10989		4.46	3.0E-33	BE350127.1	EST_HUMAN	ht09g01.x1 NCI_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3146256 3' similar to contains MER29.b3 MER29 repetitive element;
1074	10989		3.4	3.0E-33	BE350127.1	EST_HUMAN	ht09g01.x1 NCI_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3146256 3' similar to contains MER29.b3 MER29 repetitive element;
2400	12721		1.48	3.0E-33	AV647851.1	EST_HUMAN	AY647851 GLC Homo sapiens cDNA clone GLCFCF09 3'
99	10003		2.33	2.0E-33	AI160189.1	EST_HUMAN	qb67g03.x1 Soares_fetal_heart_NbH1H9W Homo sapiens cDNA clone IMAGE:1705204 3' similar to contains OFR.t1 OFR repetitive element;
4322	14219		4.27	2.0E-33	BE159039.1	EST_HUMAN	MRO-HT0405-160300-202-408 HT0405 Homo sapiens cDNA
4911	14790	24565	5.1	2.0E-33	AA628683.1	EST_HUMAN	ab51g11.1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone IMAGE:844388 5' similar to gb:XM00734.cds1 TUBULIN BETA-5 CHAIN (HUMAN);
5026	14899	24668	1.73	2.0E-33	11421332	NT	Homo sapiens hypothetical protein SRP-b2 (SRP-b2), mRNA
5026	14899	24669	1.73	2.0E-33	11421332	NT	Homo sapiens hypothetical protein SRP-b2 (SRP-b2), mRNA
5868	15775	25894	1.61	2.0E-33	AI277492.1	EST_HUMAN	ql96d01.x1 Soares_NHMPU_S1 Homo sapiens cDNA clone IMAGE:1880161 3'
7261	17138		1.8	2.0E-33	AI052256.1	EST_HUMAN	oz21d03.x1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:1675973 3' similar to gb:M29536 TRANSLATIONAL INITIATION FACTOR 2 BETA SUBUNIT (HUMAN);
8	9994		1.44	1.0E-33	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
8637	18502	28778	2.02	1.0E-33	AW996818.1	EST_HUMAN	QV3-BN0047-230200-102-603 BN0047 Homo sapiens cDNA
8921	18729	29024	5.33	1.0E-33	U60822.1	NT	Human dystrophin (DMD) gene, exons 7, 8 and 9, and partial cds
9553	19161		1.92	1.0E-33	AI927191.1	EST_HUMAN	wo88c06.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2462410 3'

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9723	9994		3.04	1.0E-33	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
9754	19278	25229	1.34	1.0E-33	AV727809.1	EST_HUMAN	AV727809 HTC Homo sapiens cDNA clone HTCCNC12 5'
9927	16399		2.09	9.0E-34	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
1427	11332	21198	1.98	7.0E-34	T70845.1	EST_HUMAN	y415e05.11 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:108320 5'
9340	19020		3.08	7.0E-34	H12866.1	EST_HUMAN	y14c10.11 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:148722 5'
463	10406	20225	1.46	6.0E-34	U10991.1	NT	Human G2 protein mRNA, partial cds
463	10406	20226	1.46	6.0E-34	U10991.1	NT	Human G2 protein mRNA, partial cds
9153	18903	28340	1.44	6.0E-34	U03686.1	NT	Mus musculus DAB/2J half-specific (hac1-1) gene
1837	11734		2.23	5.0E-34	7706500	NT	Homo sapiens Npw38-binding protein NpwBP (LOC51729), mRNA
4993	14868	24831	4	5.0E-34	U30893.1	NT	Human splicing factor SRp55-1 (SRp-55) mRNA, complete cds
7144	17021	27215	1.18	5.0E-34	AF078779.1	NT	Rattus norvegicus putative four repeat ion channel mRNA, complete cds
8046	17937	28186	2.12	5.0E-34	AB037856.1	NT	Homo sapiens mRNA for KIAA1435 protein, partial cds
8578	18446		2.01	5.0E-34	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
1953	11848	21735	2.11	4.0E-34	A1804667.1	EST_HUMAN	tt94c06.x1 NCL_CGAP_P128 Homo sapiens cDNA clone IMAGE:2249194 3'
2687	12582	22441	0.98	4.0E-34	8022807	NT	Homo sapiens hypothetical protein FLJ10989 (FLJ10989), mRNA
8492	18365		4.81	3.0E-34	BF035327.1	EST_HUMAN	601458631F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3862086 5'
1488	11393	21254	8.56	1.0E-34	P12236	SWISSPROT	ADP-ATP CARRIER PROTEIN, LIVER ISOFORM T2 (ADP/ATP TRANSLOCASE 3) (ADENINE NUCLEOTIDE TRANSLOCATOR 3) (ANT 3)
3621	13535	23320	1.46	1.0E-34	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
3979	13886	23661	0.78	1.0E-34	AY009397.1	NT	Homo sapiens WNT3 precursor (WNT3) mRNA, complete cds
3979	13886	23662	0.78	1.0E-34	AY009397.1	NT	Homo sapiens WNT3 precursor (WNT3) mRNA, complete cds
4381	14277		4.02	1.0E-34	BE071414.1	EST_HUMAN	RC2-BT0506-240400-016-h08 BT0506 Homo sapiens cDNA
4920	14799		0.86	1.0E-34	AW845706.1	EST_HUMAN	MR0-CT0066-280999-002-d11 CT0066 Homo sapiens cDNA
5731	15639	25743	1.99	1.0E-34	BE874052.1	EST_HUMAN	601484430F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3886999 5'
5731	15639	25744	1.99	1.0E-34	BE874052.1	EST_HUMAN	601484430F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3886999 5'
7155	17032	27226	3.87	1.0E-34	AW368451.1	EST_HUMAN	CM4-HT0193-061099-022-g06 HT0193 Homo sapiens cDNA
7591	17442	27668	8.89	1.0E-34	AL036636.1	EST_HUMAN	DKFZp564A1563 r1 564 (synonym: hfb2) Homo sapiens cDNA clone DKFZp564A1563 5'
9746	19307		2.92	1.0E-34	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
3594	13508	23296	1.26	9.0E-35	AW663302.1	EST_HUMAN	h177506.y1 NCL_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2968787 5'
219	10189		24.25	8.0E-35	6031190	NT	Homo sapiens prohibitin (PHB) mRNA
1703	11604	21475	3.3	8.0E-35	BF589937.1	EST_HUMAN	naa3a08.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3255134 3' similar to TR:O75912 O75912 DIACYLGLYCEROL KINASE IOTA. ;

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1703	11604	21476	3.3	8.0E-35	BF569937.1	EST_HUMAN	nea33a08.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3258134 3' similar to TR:O75912
4761	14646	24435	3.09	8.0E-35	BF183195.1	EST_HUMAN	O75912 DIACYLGLYCEROL KINASE IOTA.
8075	17966	28217	3	8.0E-35	BE378480.1	EST_HUMAN	G01809588F1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:4040324 5'
9265	18969		3.49	8.0E-35	BF569282.1	EST_HUMAN	G01236468F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3608513 5'
5905	15811	25937	1.52	7.0E-35	11425417	NT	G02184624T1 NIH_MGC_42 Homo sapiens cDNA clone IMAGE:4300660 3'
1391	11296	21154	1.28	6.0E-35	AA757115.1	EST_HUMAN	Homo sapiens phosphatidylinositol glycan, class L (PIGL), mRNA
1925	11820	21699	1.78	6.0E-35	6005975	NT	an53h03.s1 Soares_testis_NHT Homo sapiens cDNA clone 1309397 3'
6610	16490	26876	3.6	6.0E-35	6005921	NT	Homo sapiens zinc finger protein 208 (ZNF208), mRNA
7698	17548	27771	2.7	6.0E-35	AB037786.1	NT	Homo sapiens triple functional domain (PTPRF interacting) (TRIO), mRNA
1681	11583	21454	2.29	5.0E-35	X63392.1	NT	Homo sapiens mRNA for KIAA1365 protein, partial cds
							[H]-sapiens immunoglobulin kappa light chain variable region L14
4311	14208	23992	2.2	5.0E-35	AF023268.1	NT	Homo sapiens cdk2 kinase (CLK2), proin1, cote1, glucocerebrosidase (GBA), and melaxin genes, complete cds; metaxin pseudogene and glucocerebrosidase pseudogene; and thrombospondin3 (THBS3) gene, partial cds
6761	16640		3.14	5.0E-35	BE80992.1	EST_HUMAN	G01431984F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3917229 5'
6779	16659	26848	2.18	5.0E-35	AI208765.1	EST_HUMAN	qg38c05.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1837448 3' similar to SW:Y249_HUMAN Q92539 HYPOTHETICAL PROTEIN KIAA0249.
6779	16658	26849	2.18	5.0E-35	AI208765.1	EST_HUMAN	qg38c05.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1837448 3' similar to SW:Y249_HUMAN Q92539 HYPOTHETICAL PROTEIN KIAA0249.
8517	18389		3.42	5.0E-35	AA001786.1	EST_HUMAN	zn84f12.r1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:428015 5'
1415	11321	21186	14.91	4.0E-35	BE257907.1	EST_HUMAN	G01109719F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3350405 5'
1776	11675	21552	5.1	4.0E-35	H91193.1	EST_HUMAN	yv8a07.r1 Soares_fetal_liver_spleen_1NFLS Homo sapiens cDNA clone IMAGE:241236 5' similar to contains PTR6 repetitive element.
5042	14814		1.29	4.0E-35	BE409102.1	EST_HUMAN	G01300705F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3635401 5'
6280	16144		1.82	4.0E-35	BE350127.1	EST_HUMAN	h09g01.x1 NCL_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3146256 3' similar to contains MER29.b3
6957	16835	27030	6.84	4.0E-35	AL046566.1	EST_HUMAN	DKFZp434L148.r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434L148 5'
1561	11466	21324	9.63	3.0E-35	BE268182.1	EST_HUMAN	G01125260F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3345063 5'
2283	12167		2.42	3.0E-35	AF224492.1	NT	Homo sapiens phospholipid scramblase 1 gene, complete cds
4793	14678	24465	1.06	3.0E-35	BF376402.1	EST_HUMAN	MR1-TN0045-130500-010-e01 TN0045 Homo sapiens cDNA
5275	15197	24971	22.73	3.0E-35	BF433100.1	EST_HUMAN	7n25a09.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3565361 3' similar to TR:Q9QZH7
5275	15197	24972	22.73	3.0E-35	BF433100.1	EST_HUMAN	Q9QZH7 F-BOX PROTEIN FBL2.
5275	15197	24972	22.73	3.0E-35	BF433100.1	EST_HUMAN	Q9QZH7 F-BOX PROTEIN FBL2.

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Table 4
Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7465	17325		1.81	3.0E-35	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
103	12659	19902	1.74	2.0E-35	N88965.1	EST_HUMAN	K6932F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA clone K6932 5' similar to
1171	11083	20928	1.25	2.0E-35	T11909.1	EST_HUMAN	REPETITIVE ELEMENT
2171	12058	21961	5.2	2.0E-35	AB018413.1	NT	A971F Heart Homo sapiens cDNA clone A971
3272	13193	22991	0.97	2.0E-35	6912459	NT	Homo sapiens mRNA for Gab2, complete cds
3272	13193	22992	0.97	2.0E-35	6912459	NT	Homo sapiens Grb2-associated binder 2 (KIAA0571), mRNA
3511	13427		0.88	2.0E-35	AB020702.1	NT	Homo sapiens Grb2-associated binder 2 (KIAA0571), mRNA
3835	13747	23539	1.09	2.0E-35	BE247575.1	EST_HUMAN	Homo sapiens mRNA for KIAA0895 protein, partial cds
3835	13747	23540	1.09	2.0E-35	BE247575.1	EST_HUMAN	TCBAP2E4328 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP4328
4570	14462		2.55	2.0E-35	H49239.1	EST_HUMAN	TCBAP2E4328 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP4328
5426	15347	25401	1.66	2.0E-35	BF332417.1	EST_HUMAN	Y19a12.1r Soares fetal liver spleen 1NfLS Homo sapiens cDNA clone IMAGE:274079 5'
8175	18063	28312	3.72	2.0E-35	X59417.1	NT	QV0-BT0701-210400-199-b04 BT0701 Homo sapiens cDNA
9028	13193	22991	1.36	2.0E-35	6912459	NT	H. sapiens PROS-27 mRNA
9028	13193	22992	1.36	2.0E-35	6912459	NT	Homo sapiens Grb2-associated binder 2 (KIAA0571), mRNA
9205	18936	25354	1.51	2.0E-35	BE904978.1	EST_HUMAN	Homo sapiens Grb2-associated binder 2 (KIAA0571), mRNA
9205	18936	25355	1.51	2.0E-35	BE904978.1	EST_HUMAN	601496774F1 NIH_MGC 70 Homo sapiens cDNA clone IMAGE:3898699 5'
9725	19284		3.97	2.0E-35	AL163210.2	NT	601496774F1 NIH_MGC 70 Homo sapiens cDNA clone IMAGE:3898699 5'
9832	12659	19902	4.17	2.0E-35	N88965.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C010
40	10028	19828	4.38	1.0E-35	AA631949.1	EST_HUMAN	K6932F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA clone K6932 5' similar to
40	10028	19829	4.38	1.0E-35	AA631949.1	EST_HUMAN	REPETITIVE ELEMENT
735	10667	20500	44.43	1.0E-35	AW389473.1	EST_HUMAN	frnf16 Regional genomic DNA specific cDNA library Homo sapiens cDNA clone CR12-1
735	10667	20501	44.43	1.0E-35	AW389473.1	EST_HUMAN	frnf16 Regional genomic DNA specific cDNA library Homo sapiens cDNA clone CR12-1
891	10817		1.16	1.0E-35	T87947.1	EST_HUMAN	IL2-ST0162-131099-006-d12 ST0162 Homo sapiens cDNA
2495	12369	22262	2.31	1.0E-35	7705994	NT	IL2-ST0162-131099-006-d12 ST0162 Homo sapiens cDNA
2740	12602	22496	1.11	1.0E-35	BE350127.1	EST_HUMAN	y493a01.r1 Soares fetal liver spleen 1NfLS Homo sapiens cDNA clone IMAGE:115752 5' similar to
2740	12602	22497	1.11	1.0E-35	BE350127.1	EST_HUMAN	SP-A44282 A44282 RETROVIRUS-RELATED POLYPROTEIN - HUMAN ;
							Homo sapiens hypothetical protein (LOC51233), mRNA
							ht09g01.x1 NCI CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3146256 3' similar to contains MER29.b3
							MER29 repetitive element ;
							ht09g01.x1 NCI CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3146256 3' similar to contains MER29.b3
							MER29 repetitive element ;

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Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3104	13030	22826	1.07	1.0E-35	6006030	NT	Homo sapiens transcription elongation factor B (SIII), polypeptide 1-like (TCIEB1L) mRNA
3126	13051	22848	2.2	1.0E-35	AV650422.1	EST_HUMAN	AV650422 GLC Homo sapiens cDNA clone GLCCE06 3'
3126	13051	22849	2.2	1.0E-35	AV650422.1	EST_HUMAN	AV650422 GLC Homo sapiens cDNA clone GLCCE06 3'
4325	14222	24003	4.7	1.0E-35	7656905	NT	Mus musculus activin receptor interacting protein 1 (Arip1-pending), mRNA
4325	14222	24004	4.7	1.0E-35	7656905	NT	Mus musculus activin receptor interacting protein 1 (Arip1-pending), mRNA
5382	15301	25154	1.43	1.0E-35	11526236	NT	Homo sapiens chromatin assembly factor 1, subunit B (p80) (CHAF1B), mRNA
7501	19469	27578	2	1.0E-35	AU158595.1	EST_HUMAN	AU158595 PLACE3 Homo sapiens cDNA clone PLACE3000382 3'
7501	19469	27579	2	1.0E-35	AU158595.1	EST_HUMAN	AU158595 PLACE3 Homo sapiens cDNA clone PLACE3000382 3'
8977	18782		4.16	1.0E-35	AI525119.1	EST_HUMAN	promina-7.D01.r bvtumor Homo sapiens cDNA 5'
9186	12369	22262	1.69	1.0E-35	7705994	NT	Homo sapiens hypothetical protein (LOC51233), mRNA
9267	18971		1.37	1.0E-35	11418110	NT	Homo sapiens casein kinase 1, epsilon (CSNK1E), mRNA
9620	19198		2.26	1.0E-35	BE72832.1	EST_HUMAN	60158483F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3938985 5'
2900	12827	22822	0.94	7.0E-36	AW857579.1	EST_HUMAN	GM1-CT0315-091299-063-d07 CT0315 Homo sapiens cDNA
3080	13007		4.03	7.0E-36	4557498	NT	Homo sapiens C-terminal binding protein 2 (CTBP2) mRNA
6512	16371	26548	6.04	7.0E-36	U08672.1	NT	Human carcinoembryonic antigen gene family member 12 (CGM12) gene, exons L and L/N
6512	16371	26549	6.04	7.0E-36	U08672.1	NT	Human carcinoembryonic antigen gene family member 12 (CGM12) gene, exons L and L/N
9423	19071	25279	5.23	7.0E-36	AF052051.1	NT	Homo sapiens glutathione transferase A4 gene, exon 1
1959	11854	21741	1.88	6.0E-36	7706622	NT	Homo sapiens nitroin 2 (NINJ2), mRNA
2367	12247		6.17	6.0E-36	AB035346.1	NT	Homo sapiens TCL6 gene, exon 12
3587	13501	23290	0.91	6.0E-36	BF515101.1	EST_HUMAN	UI-H-BW1-amv-c-12-Q-UJ.s1 NCI CGAP Sub7 Homo sapiens cDNA clone IMAGE:3083542 3'
5288	15190	24965	19.79	6.0E-36	AI435169.1	EST_HUMAN	tf93b06.x1 Soares NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:2126195 3' similar to gbM11949 PANCREATIC SECRETORY TRYPSIN INHIBITOR PRECURSOR (HUMAN);
6221	16087	26237	3.34	6.0E-36	AW780143.1	EST_HUMAN	tf006h02.x1 NCI CGAP_Cot14 Homo sapiens cDNA clone IMAGE:3036627 3' similar to SW:IMA2_HUMAN
7027	16904	27096	2.21	6.0E-36	AF208161.1	NT	P52292 IMPORTIN ALPHA-2 SUBUNIT;
8893	18646	28931	2.74	6.0E-36	AI380499.1	EST_HUMAN	Homo sapiens synovial precursor, mRNA, complete cds
9821	19580	25071	1.69	6.0E-36	BE737154.1	EST_HUMAN	tf95c09.x1 NCI CGAP_CLL1 Homo sapiens cDNA clone IMAGE:2107024 3' similar to contains MER9.b2
133	10107	19928	6.69	5.0E-36	AJ271735.1	NT	MER9 repetitive element;
2722	12584	22478	7.71	5.0E-36	BE388436.1	EST_HUMAN	601305064F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3639782 5'
3561	13475	23264	1.96	5.0E-36	AL163209.2	NT	Homo sapiens Xq pseudoautosomal region; segment 1/2
4678	14564	24358	1.42	5.0E-36		NT	601285567F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3607289 5'
4678	14564	24359	1.42	5.0E-36		NT	Homo sapiens chromosome 21 segment HS21C009
9026	10107	19928	2.64	5.0E-36	AJ271735.1	NT	Homo sapiens API5-like 1 (API5L1), mRNA
						NT	Homo sapiens API5-like 1 (API5L1), mRNA
						NT	Homo sapiens Xq pseudoautosomal region; segment 1/2

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Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9318	19010	25337	2.36	5.0E-36	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
1205	11115	20961	1.43	4.0E-36	BE010036.1	EST_HUMAN	PM3-BN0176-100400-001-g04 BN0176 Homo sapiens cDNA
1424	11329	21196	1.54	4.0E-36	P10266	SWISSPROT	RETROVIRUS-RELATED POLYPROTEIN [CONTAINS: REVERSE TRANSCRIPTASE ; ENDONUCLEASE]
1626	11530	21389	1.58	4.0E-36	BE382574.1	EST_HUMAN	601298574F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3628386 5'
2175	12062		1.63	4.0E-36	AW247772.1	EST_HUMAN	2820020.5prime NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2820020 5'
3310	13231	23036	3.21	4.0E-36	BE389299.1	EST_HUMAN	601282266F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3604168 5'
3310	13231	23037	3.21	4.0E-36	BE389299.1	EST_HUMAN	601282266F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3604168 5'
5693	15602	25704	2.21	4.0E-36	11497041	NT	Homo sapiens a disintegrin and metalloproteinase domain 22 (ADAM22), transcript variant 3, mRNA
6511	16370	26547	1.74	4.0E-36	M33320.1	NT	Human platelet Glycoprotein IIb (GPIIb) gene, exons 2-29
6979	16856	27050	1.41	4.0E-36	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
6979	16856	27051	1.41	4.0E-36	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
8356	18233	28481	2.19	4.0E-36	AA400370.1	EST_HUMAN	zu69c10.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:743250 5'
9334	19015		1.31	4.0E-36	11420516	NT	Homo sapiens nuclear factor of activated T-cells, cytoplasmic 2 (NFATC2), mRNA
9380	19545		2.85	4.0E-36	AV753629.1	EST_HUMAN	AV753629 TP Homo sapiens cDNA clone TPGABH01 5'
681	10614	20437	2.73	3.0E-36	AF09810.1	NT	Homo sapiens neuroxin III-alpha gene, partial cds
2252	12136	22033	0.89	3.0E-36	7662401	NT	Homo sapiens KIAA0952 protein (KIAA0952), mRNA
4402	14297	24081	5.15	3.0E-36	10181139	NT	Mus musculus junctophilin 1 (Jp1-pending), mRNA
8452	18325	28584	1.78	3.0E-36	BF035327.1	EST_HUMAN	601458531F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3862086 5'
3132	13057	22857	2.7	2.0E-36	BE259287.1	EST_HUMAN	601106349F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3342706 5'
4877	14757	24534	4.62	2.0E-36	AW680376.1	EST_HUMAN	QV0-OT0030-240300-174-h04 OT0030 Homo sapiens cDNA
5371	15291	25127	2.16	2.0E-36	AF267747.1	NT	Mus musculus p47-phox gene, complete cds
5567	15483	25556	3.99	2.0E-36	T08756.1	EST_HUMAN	EST06649 Infant Brain, Bento Soares Homo sapiens cDNA clone HIBBJ28 5' end
5962	15867	25989	11.82	2.0E-36	T09029.1	EST_HUMAN	yc44a07.r1 Stratagene liver (#937224) Homo sapiens cDNA clone IMAGE:83508 5'
867	10793	20643	1.9	1.0E-36	BE409310.1	EST_HUMAN	601300938F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3635480 5'
2098	11987	21894	0.86	1.0E-36	BE146523.1	EST_HUMAN	RC1-HT0217-131199-021-h07 HT0217 Homo sapiens cDNA
2098	11987	21895	0.86	1.0E-36	BE146523.1	EST_HUMAN	RC1-HT0217-131199-021-h07 HT0217 Homo sapiens cDNA
2155	12043	21942	1.31	1.0E-36	BF673761.1	EST_HUMAN	602136493F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4272886 5'
5752	15660		5.94	1.0E-36	AI867714.1	EST_HUMAN	wb37c12.x1 NCI CGAP_GC6 Homo sapiens cDNA clone IMAGE:2307862 3' similar to contains Alu repetitive element;
6640	16520	26711	2.03	1.0E-36	AA148034.1	EST_HUMAN	zc51a12.r1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone IMAGE:590398 5'
6640	16520	26712	2.03	1.0E-36	AA148034.1	EST_HUMAN	zc51a12.r1 Stratagene endothelial cell 937223 Homo sapiens cDNA clone IMAGE:590398 5'
7220	17097	27287	2.84	1.0E-36	AW103658.1	EST_HUMAN	xe82b07.x1 NCI CGAP_Brn35 Homo sapiens cDNA clone IMAGE:2614357 3'
7824	17674	27917	4.06	1.0E-36	BF364169.1	EST_HUMAN	QV3-NN1023-010600-199-h01 NN1023 Homo sapiens cDNA

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Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8317	18194	28444	3.43	1.0E-36	AW897636.1	EST_HUMAN	CM3-NN0081-140400-147-h12 NN0081 Homo sapiens cDNA
8686	18574	28857	3.91	1.0E-36	AW504143.1	EST_HUMAN	UI-HF-BND-ale-c-03-0-UI.r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3079277 5'
9203	18934		3.74	1.0E-36		NT	Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA
9374	19040	25305	1.29	1.0E-36	11418177	NT	Homo sapiens chromosome 22 open reading frame 2 (C22ORF2), mRNA
9647	19214		3.07	1.0E-36	11418121	NT	Homo sapiens chromosome 21 segment HS21C013
9890	19371		2.89	1.0E-36	AF202723.1	NT	Homo sapiens Sad1 unc-84 domain protein 2 (SUN2) mRNA, partial cds
6368	16231	26390	1.96	9.0E-37	AW009277.1	EST_HUMAN	ws80b07.x1 NCI_CGAP_Co3 Homo sapiens cDNA clone IMAGE:2504245 3'
6368	16231	26391	1.96	9.0E-37	AW009277.1	EST_HUMAN	ws80b07.x1 NCI_CGAP_Co3 Homo sapiens cDNA clone IMAGE:2504245 3'
9462	19093		2.79	9.0E-37	W22618.1	EST_HUMAN	73D4 Human retina cDNA Tsp509I-cleaved sublibrary Homo sapiens cDNA not directional
5143	15010	24781	1.38	8.0E-37	AB020684.1	NT	Homo sapiens mRNA for KIAA0877 protein, partial cds
5213	15136		1.7	8.0E-37	BE98077.1	EST_HUMAN	CM0-UT0003-050800-503-a09 UT0003 Homo sapiens cDNA
5559	15475	25547	4.1	8.0E-37	BE350127.1	EST_HUMAN	ht09g01.x1 NCI_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3146256 3' similar to contains MER29.b3 MER29 repetitive element;
5559	15475	25548	4.1	8.0E-37	BE350127.1	EST_HUMAN	ht09g01.x1 NCI_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3146256 3' similar to contains MER29.b3 MER29 repetitive element;
5594	15499	25576	5.63	8.0E-37	AW840840.1	EST_HUMAN	RG1-CN0008-210100-072-a09_1 CN0008 Homo sapiens cDNA
6602	16482	26670	6.25	8.0E-37	X87344.1	NT	H.sapiens DMA, DMB, HLA-Z1, IPP2, LMP2, TAP1, LMP7, TAP2, DOB, DQB2 and RING8, 9, 13 and 14 genes
1263	11170		2.51	7.0E-37	AL042800.1	EST_HUMAN	DKFZp434E0422_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434E0422 5'
8140	18028	28274	6.77	7.0E-37	AI817700.1	EST_HUMAN	wk25b11.x1 NCI_CGAP_Brm25 Homo sapiens cDNA clone IMAGE:2413341 3' similar to contains PTR5.12 PTR5 repetitive element;
8268	18148	28388	4.16	7.0E-37	AI536702.1	EST_HUMAN	tm87g03.x1 NCI_CGAP_Brm25 Homo sapiens cDNA clone IMAGE:2165140 3' similar to contains L1.b3 L1 repetitive element;
9775	19292		2.48	6.0E-37	AF202723.1	NT	Homo sapiens Sad1 unc-84 domain protein 2 (SUN2) mRNA, partial cds
5707	15615	25716	3.37	5.0E-37	AA307123.1	EST_HUMAN	EST178035 Colon carcinoma (HCC) cell line Homo sapiens cDNA 5' end
5707	15615	25717	3.37	5.0E-37	AA307123.1	EST_HUMAN	EST178035 Colon carcinoma (HCC) cell line Homo sapiens cDNA 5' end
8292	18171		4.17	5.0E-37	7657117	NT	Homo sapiens glycine C-acetyltransferase (2-amino-3-ketobutyrate-CoA ligase) (GCAT), mRNA
9198	18931		3.57	5.0E-37	AF149773.1	NT	Homo sapiens NOD1 protein (NOD1) gene, exons 1, 2, and 3
2374	12254	22145	2.23	4.0E-37	AA702794.1	EST_HUMAN	z90b04.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:448015 3'
5160	15027		1.11	4.0E-37	N62051.1	EST_HUMAN	EST52g10 WATM1 Homo sapiens cDNA clone 52g10 similar to human STS G04101
1970	11863	21755	2.85	3.0E-37	AL048956.1	EST_HUMAN	DKFZp434L2418_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434L2418
1970	11863	21756	2.85	3.0E-37	AL048956.1	EST_HUMAN	DKFZp434L2418_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434L2418
2465	12341		1.7	3.0E-37	AW961150.1	EST_HUMAN	EST1373222 IMAGE resequences, MAGF Homo sapiens cDNA
2936	12863		3.02	3.0E-37	AW961150.1	EST_HUMAN	EST1373222 IMAGE resequences, MAGF Homo sapiens cDNA

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1064	10980	20824	1.94	2.0E-37	AU131202.1	EST_HUMAN	AU131202 NT2RP3 Homo sapiens cDNA clone NT2RP3002166 5'
1064	10980	20825	1.94	2.0E-37	AU131202.1	EST_HUMAN	AU131202 NT2RP3 Homo sapiens cDNA clone NT2RP3002166 5'
1921	11816	21895	1.47	2.0E-37	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
3818	13730	23519	5.05	2.0E-37	4503210	NT	Homo sapiens cytochrome P450, subfamily XXVIA (steroid 27-hydroxylase, cerebrotendinous xanthomatosis), polypeptide 1 (CYP27A1b) mRNA
6007	15912	26039	3.36	2.0E-37	AA346720.1	EST_HUMAN	EST52931 Fetal heart II Homo sapiens cDNA 5' end
6685	16565	26759	3.23	2.0E-37	BF204032.1	EST_HUMAN	601869157F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4111406 5'
8845	16657	28945	16.4	2.0E-37	AF176013.1	NT	Homo sapiens J domain containing protein 1 isoform b (JDP1) mRNA, complete cds
9933	19403		3.15	2.0E-37	11417972	NT	Homo sapiens pescadillo (zebrafish) homolog 1, containing BRCT domain (PES1), mRNA
2041	11932	21828	3.61	1.0E-37	AL163281.2	NT	Homo sapiens chromosome 21 segment HS21C081
3878	13789	23577	22.51	1.0E-37	AF189011.1	NT	Homo sapiens ribonuclease III (RN3) mRNA, complete cds
4072	13974	23753	0.96	1.0E-37	BE872365.1	EST_HUMAN	601448619F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3852852 5'
4857	14737	24517	2.13	1.0E-37	BF371719.1	EST_HUMAN	QV0-FN0180-280700-318-c10 FN0180 Homo sapiens cDNA
7072	16949	27141	2.85	1.0E-37	AA171406.1	EST_HUMAN	zs21502.r1 Stratiogene neuroepithelium (#937231) Homo sapiens cDNA clone IMAGE:610059 5' similar to contains L1 t2 L1 repetitive element ;
8082	17673	28222	20.50	1.0E-37	M22878.1	NT	Human somatic cytochrome c (HC1) processed pseudogene, complete cds
9508	19122		2.46	1.0E-37	BE771814.1	EST_HUMAN	OM3-FT0096-140700-243-d07 FT0096 Homo sapiens cDNA
5530	15447	25514	3.05	9.0E-38	10048482	NT	Rattus norvegicus multidomain presynaptic cytomatrix protein Piccolo (LOC56768), mRNA
1203	11113	20959	1.95	8.0E-38	11436955	NT	Homo sapiens Grb2-associated binder 2 (KIAA0571), mRNA
2449	12326	22225	1.44	8.0E-38	BF346221.1	EST_HUMAN	602018401F1 NCI_CGAP_Brm67 Homo sapiens cDNA clone IMAGE:4153992 5'
9568	11113	20959	1.36	8.0E-38	11436955	NT	Homo sapiens Grb2-associated binder 2 (KIAA0571), mRNA
2135	12023	21920	1.38	7.0E-38	AW972825.1	EST_HUMAN	EST384920 MAGE resequences, MAGI Homo sapiens cDNA
3005	12933	22726	1.76	6.0E-38	BF03033.1	EST_HUMAN	601465722F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:38569348 5'
5432	15352	25407	1.89	6.0E-38	11425114	NT	Homo sapiens zinc finger protein ZNF287 (ZNF287), mRNA
5432	15352	25408	1.69	6.0E-38	11425114	NT	Homo sapiens zinc finger protein ZNF287 (ZNF287), mRNA
9060	18842		4.46	6.0E-38	11435947	NT	Homo sapiens chromosome 12 open reading frame 3 (C12ORF3), mRNA
9542	19143	25266	6.66	6.0E-38	AB002059.1	NT	Homo sapiens DNA for Human P2XM, complete cds
710	10642	20468	1.15	5.0E-38	AW971819.1	EST_HUMAN	EST383908 MAGE resequences, MAGI Homo sapiens cDNA
2404	12281	22178	1.79	5.0E-38	AJ237740.1	NT	Homo sapiens RIBIIR gene (partial), exon 8
6191	16076	26225	2.42	5.0E-38	BE871610.1	EST_HUMAN	601460149F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3854074 5'
113	10092	19909	2.56	4.0E-38	Z25466.1	NT	B.taurus mitochondrial aspartate aminotransferase mRNA, complete CDS
113	10092	19910	2.56	4.0E-38	Z25466.1	NT	B.taurus mitochondrial aspartate aminotransferase mRNA, complete CDS
1141	11055	20897	0.82	3.0E-38	11435947	NT	Homo sapiens chromosome 12 open reading frame 3 (C12ORF3), mRNA
2053	11943		4.39	3.0E-38	AF003530.1	NT	Homo sapiens homeobox protein CDX4 (CDX4) gene, complete cds and flanking repeat regions

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3638	13552		1.11	3.0E-38	7549807	NT	Homo sapiens HIRA interacting protein 4 (dnaj-like) (HIRIP4), mRNA
3781	13693	23480	1.65	3.0E-38	P53538	SWISSPROT	SSU72 PROTEIN
3781	13693	23481	1.65	3.0E-38	P53538	SWISSPROT	
4513	14406		0.85	3.0E-38	BE279301.1	EST_HUMAN	60115/633F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3504272 5'
6050	19459	26083	7.17	3.0E-38	AL163300.2	NT	Homo sapiens chromosome 21 segment HS21C100
6478	16337	26504	7.64	3.0E-38	BF373684.1	EST_HUMAN	CM3-FT0181-140700-241-f07 FT0181 Homo sapiens cDNA
7025	16602	27094	1.78	3.0E-38	H85494.1	EST_HUMAN	yw8b04.11 Soares melanocyte 2Nb1M Homo sapiens cDNA clone IMAGE:249775 5'
7025	16602	27095	1.78	3.0E-38	H85494.1	EST_HUMAN	yw8b04.11 Soares melanocyte 2Nb1M Homo sapiens cDNA clone IMAGE:249775 5'
7727	17577		1.58	3.0E-38	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
44	10032	19836	1.41	2.0E-38	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
1358	11264	21120	2.6	2.0E-38	5902097	NT	Homo sapiens SMT3 (suppressor of mit two 3, yeast) homolog 2 (SMT3H2), mRNA
1627	11531	21390	1.66	2.0E-38	AA437353.1	EST_HUMAN	zw30d01.r1 Soares ovary tumor NBHOT Homo sapiens cDNA clone IMAGE:770785 5' similar to SW:MA12_RABIT P45701 MANNOSYL-OLIGOSACCHARIDE ALPHA-1,2-MANNOSIDASE ;
1627	11531	21391	1.66	2.0E-38	AA437353.1	EST_HUMAN	zw30d01.r1 Soares ovary tumor NBHOT Homo sapiens cDNA clone IMAGE:770785 5' similar to SW:MA12_RABIT P45701 MANNOSYL-OLIGOSACCHARIDE ALPHA-1,2-MANNOSIDASE ;
6941	16819		4.7	2.0E-38	BE165980.1	EST_HUMAN	MR3-HT0487-150200-173-g01 HT0487 Homo sapiens cDNA
7316	17192		1.47	2.0E-38	BE222256.1	EST_HUMAN	hu09g02.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3166130 3' similar to TR:O02710 O02710
7970	17820	28063	1.66	2.0E-38	D63479.2	NT	GAG POLYPEPTIDE ;
8781	18596	28885	5.24	2.0E-38	BE712790.1	EST_HUMAN	Homo sapiens mRNA for KIAA0145 protein, partial cds
8907	18715	29008	3.69	2.0E-38	AF190501.1	NT	QV2-HT0698-080800-283-a05 HT0698 Homo sapiens cDNA
8907	18715	29009	3.69	2.0E-38	AF190501.1	NT	Homo sapiens leucine-rich repeat-containing G protein-coupled receptor 6 (LGR6) mRNA, partial cds
9112	18876		4.05	2.0E-38	AV726988.1	EST_HUMAN	Homo sapiens leucine-rich repeat-containing G protein-coupled receptor 6 (LGR6) mRNA, partial cds
9115	18878		2	2.0E-38	AB012723.1	NT	AV726988 HTG Homo sapiens cDNA clone HTCAXH07 5'
9412	19064	25313	3.86	2.0E-38	H55641.1	EST_HUMAN	Homo sapiens gene for kinesin-like protein, complete cds
9472	19099		2.26	2.0E-38	S74906.1	NT	CHR220580 Chromosome 22 exon Homo sapiens cDNA clone C22_788 5'
9924	19396		2.56	2.0E-38	11418248	NT	E1 beta=pyruvate dehydrogenase beta (promoter) [human, placenta, Genomic, 1280 nt]
1077	10993		2.29	1.0E-38	AA401570.1	EST_HUMAN	Homo sapiens sulfotransferase-related protein (SUL TX3), mRNA
1954	11849	21736	0.94	1.0E-38	4885288	NT	zu62502.r1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:742539 5' similar to contains element MER19 repetitive element ;
1973	11866	21758	1	1.0E-38	7661969	NT	Homo sapiens guanine nucleotide binding protein-like 1 (GNL1), mRNA
2445	12322	22221	1.58	1.0E-38	AF270831.1	NT	Homo sapiens KIAA0173 gene product (KIAA0173), mRNA
							Homo sapiens cyclin K (CCNK) gene, exon 7

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4063	13965	23743	1.41	1.0E-38	AB037863.1	NT	Homo sapiens mRNA for KIAA1442 protein, partial cds
4223	14121	23896	0.83	1.0E-38	4505016	NT	Homo sapiens low density lipoprotein receptor-related protein 6 (LRP6) mRNA, and translated products
4229	14127	23902	1.31	1.0E-38	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
4229	14127	23903	1.31	1.0E-38	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
4493	14387	24173	1.21	1.0E-38	8922543	NT	Homo sapiens hypothetical protein FLJ10600 (FLJ10600), mRNA
5673	15582	25682	3.61	1.0E-38	7305360	NT	Mus musculus ologelin (Olog), mRNA
5673	15582	25683	3.61	1.0E-38	7305360	NT	Mus musculus ologelin (Olog), mRNA
6378	16240	26400	2.78	1.0E-38	AB014512.1	NT	Homo sapiens mRNA for KIAA0612 protein, partial cds
7414	17281	27489	6.23	1.0E-38	BE350127.1	EST_HUMAN	h09g01.x1 NCL_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3146256 3' similar to contains MER29.b3
9264	19481		2.33	1.0E-38	AL163284.2	NT	MER29 repetitive element ;
48	10036	19842	5.14	8.0E-39	4502312	NT	Homo sapiens chromosome 21 segment HS21C084
1372	11278	21134	1.51	8.0E-39	4758229	NT	Homo sapiens ATPase, H+ transporting, lysosomal (vacuolar proton pump) 16kD (ATP6C) mRNA
1798	11696		1.06	8.0E-39	AI823404.1	EST_HUMAN	Homo sapiens estrogen receptor-binding fragment-associated gene 9 (EBAG9) mRNA
2047	11936	21832	5.54	7.0E-39	AL163227.2	NT	wh5f10.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2384491 3' similar to TR:P87890 P87890
8184	18070	28319	2.12	6.0E-39	BF331829.1	EST_HUMAN	POL PROTEIN ;
9838	19337		2.23	6.0E-39	BE670394.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C027
991	10912	20757	1.3	5.0E-39	AF003528.1	NT	QV1-BT0631-040900-357-402 BT0631 Homo sapiens cDNA
2957	12884	22682	5.13	5.0E-39	AI750154.1	EST_HUMAN	7e34c03.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3284356 3' similar to WP:R151.6
9556	19154		1.54	5.0E-39	11420289	NT	CE00828 ;
538	10479	20291	10.53	4.0E-39	AB015610.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
3525	13441	23238	0.96	4.0E-39	AL163210.2	NT	at36b04.x1 Barsiead colon HPLRB7 Homo sapiens cDNA clone IMAGE:2374063 3' similar to TR:Q15408
6707	16587	26775	1.49	4.0E-39	AA682949.1	EST_HUMAN	Q15408 NEUTRAL PROTEASE LARGE SUBUNIT ; contains LTR7.t1 LTR7 repetitive element ;
9575	19164		3.08	4.0E-39	11418177	NT	Homo sapiens hypothetical protein FLJ10803 (FLJ10803), mRNA
9687	19240		2.03	4.0E-39	BE836452.1	EST_HUMAN	Chlorococcus aethiops mRNA for ribosomal protein S4X, complete cds
41	10029	19830	11.27	3.0E-39	AA631949.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C010
41	10029	19831	11.27	3.0E-39	AA631949.1	EST_HUMAN	ae92g04.s1 Stratagene schizo brain S11 Homo sapiens cDNA clone IMAGE:1020438 3' similar to contains
							OFR.b1 OFR repetitive element ;
							Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA
							QV0-FN0063-260600-278-c06 FN0063 Homo sapiens cDNA
							fmc16 Regional genomic DNA specific cDNA library Homo sapiens cDNA clone CR12-1
							fmc16 Regional genomic DNA specific cDNA library Homo sapiens cDNA clone CR12-1

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
41	10029	19832	11.27	3.0E-39	AA631949.1	EST_HUMAN	frf1c16 Regional genomic DNA specific cDNA library Homo sapiens cDNA clone OR12-1
9104	18871	28781	5.51	3.0E-39	AI084557.1	EST_HUMAN	ox63a10.s1 Scores_NH-MP1u_S1 Homo sapiens cDNA clone IMAGE:1660986 3' similar to SW:GTR5_RAT P43427 GLUCOSE TRANSPORTER TYPE 5, SMALL INTESTINE ;
9104	18871	28782	5.51	3.0E-39	AI084557.1	EST_HUMAN	ox63a10.s1 Scores_NH-MP1u_S1 Homo sapiens cDNA clone IMAGE:1660986 3' similar to SW:GTR5_RAT
9147	18900		4.42	3.0E-39	H37903.1	EST_HUMAN	P43427 GLUCOSE TRANSPORTER TYPE 5, SMALL INTESTINE ;
879	10805		4.03	2.0E-39	BE409203.1	EST_HUMAN	yp51c06.s1 Scores retina N2b4HR Homo sapiens cDNA clone IMAGE:190954 3'
894	10820		17.44	2.0E-39	AI525119.1	EST_HUMAN	f01301607F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3636289 5'
1015	10933		3.61	2.0E-39	AF000573.1	EST_HUMAN	promina-7 D01.r bvtumor Homo sapiens cDNA 5'
1513	11418		10.15	2.0E-39	AW372318.1	EST_HUMAN	Homo sapiens homogenisate 1,2-dioxygenase gene, complete cds
1930	11825	21707	10.03	2.0E-39	AA720574.1	EST_HUMAN	PM0-BT0340-211299-003-d02 BT0340 Homo sapiens cDNA nw21g02.s1 NCI_CGAP_GC80 Homo sapiens cDNA clone IMAGE:1241138 3' similar to contains THR.t3 THR repetitive element ;
2587	12458	22349	1.75	2.0E-39	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
4303	14201	23985	1.36	2.0E-39	BF370207.1	EST_HUMAN	RC4-FN0037-290700-011-a10 FN0037 Homo sapiens cDNA
5375	15295	25142	3.4	2.0E-39	AA508980.1	EST_HUMAN	ng86f03.s1 NCI_CGAP_P16 Homo sapiens cDNA clone IMAGE:941693
6360	16223	26384	2.17	2.0E-39	AA080867.1	EST_HUMAN	zn06f02.r1 Strategene hNT neuron (#637233) Homo sapiens cDNA clone IMAGE:546351 5'
8731	18587	28874	2.33	2.0E-39	D86964.1	NT	Human mRNA for KIAA0209 gene, partial cds
9922	19394		2.31	2.0E-39	11425464	NT	Homo sapiens myosin phosphatase, target subunit 2 (MYPT2), mRNA
1497	11401	21261	1.78	1.0E-39	AJ006345.1	NT	Homo sapiens KVLQ11 gene
1497	11401	21262	1.78	1.0E-39	AJ006345.1	NT	Homo sapiens KVLQ11 gene
1514	11419	21275	4.95	1.0E-39	7657020	NT	Homo sapiens DKFZp434P21.1 protein (DKFZP434P21.1), mRNA
4561	14453	24239	5.49	1.0E-39	AW951995.1	EST_HUMAN	EST364065 MAGe resequences, MAGB Homo sapiens cDNA
4561	14453	24240	5.49	1.0E-39	AW951995.1	EST_HUMAN	EST364065 MAGe resequences, MAGB Homo sapiens cDNA
4604	14492	24279	8.58	1.0E-39	7657020	NT	Homo sapiens DKFZp434P21.1 protein (DKFZP434P21.1), mRNA
5459	15379	25439	1.54	1.0E-39	T80876.1	EST_HUMAN	yd26g06.r1 Scores fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:109402 5' similar to contains Alu repetitive element; contains LTR1 repetitive element ;
5475	15395	25460	4.36	1.0E-39	AJ278170.1	NT	Mus musculus mRNA for neuronal interacting factor X 1 (NIX1) (Nix1 gene)
5475	15395	25461	4.36	1.0E-39	AJ278170.1	NT	Mus musculus mRNA for neuronal interacting factor X 1 (NIX1) (Nix1 gene)
6083	16028		1.66	1.0E-39	11436736	NT	Homo sapiens tubby like protein 3 (TULP3), mRNA
6357	16220	26392	1.75	1.0E-39	D78132.1	NT	Homo sapiens mRNA for ras-related GTP-binding protein, complete cds
543	10484	20284	1.67	9.0E-40	5903210	NT	Homo sapiens UDP-glucose pyrophosphorylase 2 (UGP2), mRNA
1215	11123	20971	10.19	9.0E-40	4755145	NT	Homo sapiens AE-binding protein 1 (AEBP1) mRNA
1215	11123	20972	10.19	9.0E-40	4755145	NT	Homo sapiens AE-binding protein 1 (AEBP1) mRNA

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Table 4
Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1433	11338	21205	5.04	9.0E-40	4507512	NT	Homo sapiens tissue inhibitor of metalloproteinase 3 (Sorsby fundus dystrophy, pseudoinflammatory) (TIMP3) mRNA
3892	15069	23886	3.58	9.0E-40	AB033070.1	NT	Homo sapiens mRNA for KIAA1244 protein, partial cds
4250	14149	23923	0.82	9.0E-40	4507848	NT	Homo sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13) mRNA
4398	14149	23923	1.12	9.0E-40	4507848	NT	Homo sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13) mRNA
3004	12932	22725	0.95	8.0E-40	AA078165.1	EST_HUMAN	7H15A04 Chromosome 7 HeLa cDNA Library Homo sapiens cDNA clone 7H15A04
3847	13758		2.41	8.0E-40	BE396541.1	EST_HUMAN	601288958F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3619166 5'
6541	16399	26578	1.56	7.0E-40	U60325.1	NT	Human DNA polymerase gamma mRNA, nuclear gene encoding mitochondrial protein, complete cds
6541	16399	26579	1.56	7.0E-40	U60325.1	NT	Human DNA polymerase gamma mRNA, nuclear gene encoding mitochondrial protein, complete cds
8270	18150	28391	2.83	7.0E-40	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
2696	12560	22449	3.88	6.0E-40	AA361275.1	EST_HUMAN	EST70527 T-cell lymphoma Homo sapiens cDNA 5' end similar to zinc finger protein family
2696	12560	22450	3.88	6.0E-40	AA361275.1	EST_HUMAN	EST70527 T-cell lymphoma Homo sapiens cDNA 5' end similar to zinc finger protein family
5616	15531		2.07	6.0E-40	BE604766.1	EST_HUMAN	hz40g01.x1 NCI_CGAP_GC8 Homo sapiens cDNA clone IMAGE:3210480 3'
6141	15989	26124	3.08	6.0E-40	11439783	NT	Homo sapiens fatty acid desaturase 1 (FADS1), mRNA
6141	15989	26125	3.08	6.0E-40	11439783	NT	Homo sapiens fatty acid desaturase 1 (FADS1), mRNA
7731	17581	27804	6.82	6.0E-40	AV653028.1	EST_HUMAN	AV653028 GLC Homo sapiens cDNA clone GLCDGF04 3'
7731	17581	27805	6.82	6.0E-40	AV653028.1	EST_HUMAN	AV653028 GLC Homo sapiens cDNA clone GLCDGF04 3'
2561	12433	22326	1.89	5.0E-40	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
1834	11731	21607	1.38	4.0E-40	A1696005.1	EST_HUMAN	tt01b01.x1 NCI_CGAP_Pr28 Homo sapiens cDNA clone IMAGE:2248873 3' similar to TR:O73505 O73505 POL PROTEIN. ;
2061	11951		2.67	4.0E-40	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
4291	14189	23973	7.85	4.0E-40	7662117	NT	Homo sapiens KIAA0433 protein (KIAA0433), mRNA
6662	16542	26738	3.76	4.0E-40	AA742809.1	EST_HUMAN	inv34e10.r1 NCI_CGAP_Br4 Homo sapiens cDNA clone IMAGE:1222122
7237	17114	27308	4.87	4.0E-40	BE009416.1	EST_HUMAN	PM0-BN0167-070500-002-h12 BN0167 Homo sapiens cDNA
7237	17114	27309	4.87	4.0E-40	BE009416.1	EST_HUMAN	PM0-BN0167-070500-002-h12 BN0167 Homo sapiens cDNA
8099	17989	28238	4.07	4.0E-40	AW841585.1	EST_HUMAN	RC1-CN0017-120200-012-e04 CN0017 Homo sapiens cDNA
4040	13943	23721	0.98	3.0E-40	A1925949.1	EST_HUMAN	wh1207.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2380549 3'
6001	15905	26030	6.25	3.0E-40	11417342	NT	Homo sapiens sema domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 5A (SEMA5A), mRNA

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6882	16761	26959	4.28	3.0E-40	5454167	NT	Homo sapiens HBV associated factor (XAP4) mRNA
7186	17063	27253	1.49	3.0E-40	AF078779.1	NT	Rattus norvegicus putative four repeat ion channel mRNA, complete cds
7312	17188	27389	1.52	3.0E-40	AF078779.1	NT	Rattus norvegicus putative four repeat ion channel mRNA, complete cds
8387	18264	28515	1.93	3.0E-40	BE350127.1	EST_HUMAN	h00g01.x1 NCI_CGAP_Kid13 Homo sapiens cDNA clone IMAGE:3148256 3' similar to contains MER29.b3
8588	18456	28725	11.23	3.0E-40	6005813	NT	MER29 repetitive element ; Homo sapiens serine threonine protein kinase (NDR), mRNA
8855	18667	28954	1.96	3.0E-40	AW118799.1	EST_HUMAN	xd96h02.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2605491 3' similar to TR:Q15804
322	10283		12.69	2.0E-40	AI223036.1	EST_HUMAN	Q15804 SIMILAR TO ENV OF TYPE A AND TYPE B RETROVIRUSES AND TO CLASS II HERVS ; qg52h08.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1838847 3'
777	10707		2.72	2.0E-40	AW303868.1	EST_HUMAN	xr24e10.x1 NCI_CGAP_UK4 Homo sapiens cDNA clone IMAGE:2761098 3' similar to SW:RS5_MOUSE
1783	11681		1.4	2.0E-40	AV731601.1	EST_HUMAN	P97461 40S RIBOSOMAL PROTEIN S5 ; AV731601 HTF Homo sapiens cDNA clone HTFAZE05 5'
1892	11787	21664	2.19	2.0E-40	4506188	NT	Homo sapiens proteasome (prosome, macropain) subunit, alpha type, 7 (PSMA7) mRNA, and translated products
1892	11787	21665	2.19	2.0E-40	4506188	NT	Homo sapiens proteasome (prosome, macropain) subunit, alpha type, 7 (PSMA7) mRNA, and translated products
2026	11917	21807	1.08	2.0E-40	AI968592.1	EST_HUMAN	wf90a11.x1 NCI_CGAP_GC6 Homo sapiens cDNA clone IMAGE:2514716 3' similar to TR:Q91929 Q91929
2123	12011	21910	2.61	2.0E-40	5453592	NT	ZINC FINGER PROTEIN ; Homo sapiens adenylyl cyclase-associated protein 2 (CAP2) mRNA
2333	12214	22112	2.35	2.0E-40	AJ277892.1	NT	Homo sapiens partial TTN gene for titin
2658	12525		1.08	2.0E-40	BE275932.1	EST_HUMAN	601121567F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3345784 5'
3087	13014	22806	3.59	2.0E-40	5453592	NT	Homo sapiens adenylyl cyclase-associated protein 2 (CAP2) mRNA
4807	14691	24478	1.49	2.0E-40	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
4807	14691	24479	1.49	2.0E-40	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
865	10791		1.65	1.0E-40	AA225989.1	EST_HUMAN	nc09a09.s1 NCI_CGAP_P11 Homo sapiens cDNA clone IMAGE:1007608
2580	12451	22343	1.91	1.0E-40	BF036881.1	EST_HUMAN	601460375F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3863803 5'
2653	12520		1.92	1.0E-40	BE018348.1	EST_HUMAN	b678a10.y1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3048570 5' similar to TR:Q9Z158 Q9Z158
2707	12570	22460	0.92	1.0E-40	BF541030.1	EST_HUMAN	SYNTAXIN 17 ; 602068604F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:4067736 5'
2707	12570	22461	0.92	1.0E-40	BF541030.1	EST_HUMAN	602068604F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:4067736 5'
3258	13181		1.81	1.0E-40	4507142	NT	Homo sapiens sorting nexin 3 (SNX3) mRNA
4505	14398	24184	6.28	1.0E-40	4508012	NT	Homo sapiens zinc finger protein 200 (ZNF200) mRNA, and translated products
4892	14772	24550	0.88	1.0E-40	7705778	NT	Homo sapiens CGI-65 protein (LOC51103), mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6215	16081	26230	2.03	1.0E-40	AA573201.1	EST_HUMAN	nt42f04.s1 NCI_CGAP_AA1 Homo sapiens cDNA clone IMAGE:995167 3'
6215	16081	26231	2.03	1.0E-40	AA573201.1	EST_HUMAN	nt42f04.s1 NCI_CGAP_AA1 Homo sapiens cDNA clone IMAGE:995167 3'
8289	18168	28412	5.72	1.0E-40	AU149345.1	EST_HUMAN	AU149345 NT2RM4 Homo sapiens cDNA clone NT2RM4002122 3'
8355	18232	28480	53.3	1.0E-40	AJ239572.1	EST_HUMAN	qtr31h10.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1846339 3'
9521	19622		3.93	1.0E-40	BF334112.1	EST_HUMAN	MR2-CT0222-211099-002-e10 CT0222 Homo sapiens cDNA
8621	19501	26889	1.73	8.0E-41	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
811	12678	20585	2.36	7.0E-41	AJ934364.1	EST_HUMAN	wp04h04.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2463895 3'
811	12678	20586	2.36	7.0E-41	AJ934364.1	EST_HUMAN	wp04h04.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2463895 3'
5655	15567	25863	3.27	7.0E-41		NT	Homo sapiens a disintegrin and metalloproteinase domain 22 (ADAM22), mRNA
9931	19618		4.82	7.0E-41	11419208	NT	Homo sapiens pescadillo (zebrafish) homolog 1, containing BRCT domain (PES1), mRNA
279	10244	20064	1.72	6.0E-41	AB037163.1	NT	Homo sapiens DSCR6b mRNA, complete cds
2064	11954	21851	2.19	6.0E-41	7657042	NT	Homo sapiens Down syndrome candidate region 1 (DSCR1), mRNA
4364	14260	24044	0.94	6.0E-41	BE567816.1	EST_HUMAN	601340485F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3682677 5'
1761	11660	21532	1.31	5.0E-41	T62628.1	EST_HUMAN	yc03e10.s1 Striatogene lung (#937210) Homo sapiens cDNA clone IMAGE:79626 3'
4018	13622		0.98	5.0E-41	4885636	NT	Homo sapiens target of myb1 (chicken) homolog (TOM1), mRNA
5945	15850		2.55	5.0E-41	BE067042.1	EST_HUMAN	PM4-BT0341-251109-002-F11 BT0341 Homo sapiens cDNA
385	10332		1.91	4.0E-41	BE156318.1	EST_HUMAN	QV0-HIT0367-150200-114-g09 HIT0367 Homo sapiens cDNA
1082	10998	20839	1.28	4.0E-41	AU119344.1	EST_HUMAN	AU119344 HEMBA1 Homo sapiens cDNA clone HEMBA1005583 5'
1388	11293	21149	9.42	4.0E-41	AJ027117.1	EST_HUMAN	ow45e06.s1 Soares parathyroid tumor, Nbl-IPA Homo sapiens cDNA clone IMAGE:1649794 3' similar to TR:000597 000597 CYTOCHROME C-LIKE POLYPEPTIDE; contains LTR5.b1 LTR5 repetitive element;
1388	11293	21150	9.42	4.0E-41	AJ027117.1	EST_HUMAN	ow45e06.s1 Soares parathyroid tumor, Nbl-IPA Homo sapiens cDNA clone IMAGE:1649794 3' similar to TR:000597 000597 CYTOCHROME C-LIKE POLYPEPTIDE; contains LTR5.b1 LTR5 repetitive element;
1404	11309	21170	2.12	4.0E-41	AB008681.1	NT	Homo sapiens gene for activin receptor type IIB, complete cds
1618	11522	21380	8.5	4.0E-41	AJ600406.1	EST_HUMAN	tm96c04.x1 NCI_CGAP_Brm25 Homo sapiens cDNA clone IMAGE:2165988 3' similar to contains OFR.b1 OFR repetitive element;
2859	12787	22578	3.03	4.0E-41	AJ229041.1	NT	Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22; segment 1/3
2859	12787	22579	3.03	4.0E-41	AJ229041.1	NT	Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22; segment 1/3
4052	13954	23730	1.89	4.0E-41	X92685.1	NT	H. sapiens DNase I hypersensitive site (HSS-3) enhancer element
5920	15825		1.39	4.0E-41	AV758295.1	EST_HUMAN	AV758295 BM Homo sapiens cDNA clone BMFBHC06 5'
7590	17441	27657	6.01	4.0E-41	BF304693.1	EST_HUMAN	601888096F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4122119 5'
8925	18733		7.62	4.0E-41	AV710480.1	EST_HUMAN	AV710480 Cu Homo sapiens cDNA clone CuAAC07 5'
9699	19510		2.31	4.0E-41	AV708431.1	EST_HUMAN	AV708431 ADC Homo sapiens cDNA clone ADCARE02 5'

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Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
932	10857	20704	1.64	3.0E-41	AB030176.1	NT	Homo sapiens PAD-H19 mRNA for peptidylarginine deiminase type II, complete cds
4240	14139	23914	3.08	3.0E-41	AB026898.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
5047	14919		0.85	3.0E-41	AB037748.1	NT	Homo sapiens mRNA for KIAA1327 protein, partial cds
5376	15296	25143	7.36	3.0E-41	X37689.1	NT	H. sapiens mRNA for putative p64 CLCP protein
5849	16765	25873	1.49	3.0E-41	AB037808.1	NT	Homo sapiens mRNA for KIAA1387 protein, partial cds
1782	11445	21305	7.3	2.0E-41	U43701.1	NT	Human ribosomal protein L23a mRNA, complete cds
1915	11810	21888	2.3	2.0E-41	AA331940.1	EST_HUMAN	EST35818 Embryo, 8 week I Homo sapiens cDNA 5' end
2172	12059	21962	1.03	2.0E-41	D86962.1	NT	Human mRNA for KIAA0207 gene, complete cds
2221	12106	22010	4.07	2.0E-41	X89631.1	NT	G.gorilla DNA for ZNF80 gene homolog
2798	11445	21305	5.31	2.0E-41	U43701.1	NT	Human ribosomal protein L23a mRNA, complete cds
4521	14414	24199	1.06	2.0E-41	AL163267.2	NT	Homo sapiens chromosome 21 segment HS21C067
4521	14414	24200	1.06	2.0E-41	AL163267.2	NT	Homo sapiens chromosome 21 segment HS21C067
6522	16381	26559	6.59	2.0E-41	AF038404.1	NT	Homo sapiens homolog of Nedd5 (hNedd5) mRNA, complete cds
6702	16582	26772	1.33	2.0E-41	M96944.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
6702	16582	26773	1.33	2.0E-41	M96944.1	NT	Human B-cell specific transcription factor (BSAP) mRNA, complete cds
6716	16596	26786	1.39	2.0E-41	AA328265.1	EST_HUMAN	EST31723 Embryo, 12 week I Homo sapiens cDNA 5' end
7188	17065	27255	1.7	2.0E-41	P52742	SWISSPROT	ZINC FINGER PROTEIN 135
8777	18594	28882	3.46	2.0E-41	AA372637.1	EST_HUMAN	EST84555 Colon adenocarcinoma IV Homo sapiens cDNA 5' end
4465	14359	24149	4.64	1.0E-41	6678468	NT	Mus musculus tubulin alpha 6 (Tuba6), mRNA
7420	17287	27494	1.8	1.0E-41	AI217868.1	EST_HUMAN	qf75c10.x1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1755858 3'
9197	18930		2.63	1.0E-41	11526291	NT	Homo sapiens hypothetical protein FLJ20454 (FLJ20454), mRNA
6958	16836		1.33	9.0E-42	BE179191.1	EST_HUMAN	RC0-HIT0613-210300-032-g01 HT0613 Homo sapiens cDNA
7292	17168	27367	2.63	9.0E-42	11560151	NT	Homo sapiens hypothetical C2H2 zinc finger protein FLJ22504 (FLJ22504), mRNA
7292	17168	27368	2.63	9.0E-42	11560151	NT	Homo sapiens hypothetical C2H2 zinc finger protein FLJ22504 (FLJ22504), mRNA
455	10399	20216	5.37	8.0E-42	AF003630.1	NT	Homo sapiens homeobox protein CDX4 (CDX4) gene, complete cds and flanking repeat regions
2062	11952	21849	1.32	8.0E-42	AB026898.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
9238	19625		32.6	8.0E-42	AA493896.1	EST_HUMAN	nt07c02.s1 NCI CGAP_Thy1 Homo sapiens cDNA clone IMAGE:9435586 similar to TR:G434304 G434304
916	10840		1.83	7.0E-42	AL163285.2	NT	367BP EXPRESSED SEQUENCE TAG MRNA ;
1812	11709	21586	3.25	6.0E-42	AF012872.1	NT	Homo sapiens chromosome 21 segment HS21C085
1812	11709	21587	3.25	6.0E-42	AF012872.1	NT	Homo sapiens phosphatidylinositol 4-kinase 230 (pi4K230) mRNA, complete cds
1812	11709	21587	3.25	6.0E-42	AF012872.1	NT	Homo sapiens phosphatidylinositol 4-kinase 230 (pi4K230) mRNA, complete cds

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Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2244	12128		3.51	6.0E-42	AW238656.1	EST_HUMAN	xp29f08.x1 NCL_CGAP_HN10 Homo sapiens cDNA clone IMAGE:2741799 3' similar to contains L1.t1 L1 repetitive element:
4936	14814		1.04	6.0E-42	AI284770.1	EST_HUMAN	qu24h09.x1 NCL_CGAP_Br12 Homo sapiens cDNA clone IMAGE:1965761 similar to contains Alu repetitive element:
5355	15275	25105	1.81	6.0E-42	AB028990.1	NT	Homo sapiens mRNA for KIAA1067 protein, partial cds
5504	15275	25105	1.72	6.0E-42	AB028990.1	NT	Homo sapiens mRNA for KIAA1067 protein, partial cds
131	10105		5.44	5.0E-42	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
431	10376	20197	1.17	5.0E-42	BE217913.1	EST_HUMAN	h31e11.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3175052 3'
478	10422		2.94	5.0E-42	5730038	NT	Homo sapiens SET domain and mariner transposase fusion gene (SETMAR) mRNA
479	10423		1.27	5.0E-42	5730038	NT	Homo sapiens SET domain and mariner transposase fusion gene (SETMAR) mRNA
6016	15920	26050	1.76	5.0E-42	11433063	NT	Homo sapiens ubiquitin protein ligase E3A (human papilloma virus E6-associated protein, Angelman syndrome) (UBE3A), mRNA
6016	15920	26051	1.76	5.0E-42	11433063	NT	Homo sapiens ubiquitin protein ligase E3A (human papilloma virus E6-associated protein, Angelman syndrome) (UBE3A), mRNA
6072	16055	26203	2.75	5.0E-42	11417957	NT	Homo sapiens myotubularin related protein 3 (MTMR3), mRNA
6274	16138	26294	1.57	5.0E-42	AF071569.1	NT	Homo sapiens multifunctional calcium/calmodulin-dependent protein kinase II delta2 isoform mRNA, complete cds
7098	16975	27168	2.76	5.0E-42	AB037715.1	NT	Homo sapiens mRNA for KIAA1294 protein, partial cds
8366	18243	28494	2.15	5.0E-42	8923162	NT	Homo sapiens hypothetical protein FLJ20163 (FLJ20163), mRNA
736	10668	20502	8.89	4.0E-42	AF055066.1	NT	Homo sapiens MHC class 1 region
736	10668	20503	8.89	4.0E-42	AF055066.1	NT	Homo sapiens MHC class 1 region
1050	10967	20809	2.67	4.0E-42	AF189011.1	NT	Homo sapiens ribonuclease III (RN3), mRNA, complete cds
4100	14000	23779	1.61	4.0E-42	X59417.1	NT	Hi.sapiens PROS-27 mRNA
4156	14056	23830	4.52	4.0E-42	4506496	NT	Homo sapiens regulatory factor X, 4 (influences HLA class II expression) (RFX4) mRNA
4480	14374	24162	10.26	4.0E-42	4508008	NT	Homo sapiens zinc finger protein 177 (ZNF177) mRNA
8041	17932	28179	2.07	4.0E-42	AW818630.1	EST_HUMAN	RC1-ST0278-040400-018-h11 ST0278 Homo sapiens cDNA
8041	17932	28180	2.07	4.0E-42	AW818630.1	EST_HUMAN	RC1-ST0278-040400-018-h11 ST0278 Homo sapiens cDNA
8714	18531	28815	3.22	4.0E-42	BF036327.1	EST_HUMAN	601458631F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3862086 5'
98	10084		0.78	3.0E-42	AA486105.1	EST_HUMAN	ab14e10.s1 Stratagene lung (#937210) Homo sapiens cDNA clone IMAGE:840810 3' similar to contains THR.t2 THR repetitive element:
1467	11372	21259	3.63	2.0E-42	BF376834.1	EST_HUMAN	RCO-TN0079-110900-024-g07 TN0079 Homo sapiens cDNA
2361	12241		3.86	2.0E-42	AW899344.1	EST_HUMAN	RC3-NN0070-270400-011-h10 NN0070 Homo sapiens cDNA
2375	12255	22146	2.15	2.0E-42	AW250059.1	EST_HUMAN	2819293.3prime NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2819293 3'
5519	15437	25500	10.2	2.0E-42	AW953568.1	EST_HUMAN	EST367438 MAGE resequences, MAGEC Homo sapiens cDNA

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Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5519	15437	25501	10.2	2.0E-42	AW955368.1	EST_HUMAN	EST1367438 IMAGE resequences, MAGC Homo sapiens cDNA
7663	17513	27739	1.27	2.0E-42	BE538919.1	EST_HUMAN	G01061284F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3447620 5'
717	10648	20478	1.06	1.0E-42	X57147.1	NT	Human endogenous retrovirus pHE.1 (ERV9)
1026	10944	20789	0.96	1.0E-42	AW295809.1	EST_HUMAN	UI-H-B1-aff-e-04-0-J1 st NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2721871 3'
1085	11001	20842	1.11	1.0E-42	AJ251818.1	NT	Homo sapiens partial C9 gene for complement component C9, exon 1
1085	11001	20843	1.11	1.0E-42	AJ251818.1	NT	Homo sapiens partial C9 gene for complement component C9, exon 1
1222	12688	20963	12.78	1.0E-42	AF087166.1	NT	Homo sapiens NADH-ubiquinone oxidoreductase AGGG subunit precursor homolog mRNA, nuclear gene encoding mitochondrial protein, complete cds
1222	12688	20984	12.78	1.0E-42	AF067166.1	NT	Homo sapiens NADH-ubiquinone oxidoreductase AGGG subunit precursor homolog mRNA, nuclear gene encoding mitochondrial protein, complete cds
1673	11575	21443	1.46	1.0E-42	11423219	NT	Homo sapiens rec (LOC51201), mRNA
1986	11879	21772	0.91	1.0E-42	AF110296.1	NT	Homo sapiens PDNP1 gene, exon 17
2497	12372	22264	1.98	1.0E-42	5174458	NT	Homo sapiens major histocompatibility complex, class II, DM alpha (HLA-DMA) mRNA
2935	12862	22862	8.93	1.0E-42	4505624	NT	Homo sapiens origin recognition complex, subunit 5 (yeast homolog)-like (ORC5L) mRNA, and translated products
3647	13561	23347	2.15	1.0E-42	7662027	NT	Homo sapiens KIAA0255 gene product (KIAA0255), mRNA
3849	13760	23553	1.02	1.0E-42	AL163267.2	NT	Homo sapiens chromosome 21 segment HS21C067
4153	14053	23827	1.72	1.0E-42	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
4489	14383	24170	0.86	1.0E-42	AW813617.1	EST_HUMAN	RC3-ST0197-161099-012-a03 ST0197 Homo sapiens cDNA
4640	14528	24316	2.85	1.0E-42	5803122	NT	Homo sapiens proteasome inhibitor (PI31), mRNA
4640	14528	24317	2.85	1.0E-42	5803122	NT	Homo sapiens proteasome inhibitor (PI31), mRNA
4669	14555	24348	5.35	1.0E-42	4506758	NT	Homo sapiens ryanodine receptor 3 (RYR3) mRNA
4769	14654	24442	1.2	1.0E-42	AB033114.1	NT	Homo sapiens mRNA for KIAA1288 protein, partial cds
5048	14920	24893	0.98	1.0E-42	4501912	NT	Homo sapiens a disintegrin and metalloproteinase domain 23 (ADAM23) mRNA
5048	14920	24894	0.98	1.0E-42	4501912	NT	Homo sapiens a disintegrin and metalloproteinase domain 23 (ADAM23) mRNA
7805	17655	27893	3.89	9.0E-43	4757669	NT	Homo sapiens chromodomain protein, Y chromosome-like (CDYL) mRNA
8397	18273	28325	2.84	9.0E-43	AA435719.1	EST_HUMAN	Z79a07.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:728532 3'
636	10573	20386	12.13	8.0E-43	AV736824.1	EST_HUMAN	AV736824 CB Homo sapiens cDNA clone CBLAKH08 5'
636	10573	20387	12.13	8.0E-43	AV736824.1	EST_HUMAN	AV736824 CB Homo sapiens cDNA clone CBLAKH08 5'
685	10618	20441	4.33	8.0E-43	8923276	NT	Homo sapiens hypothetical protein FLJ20297 (FLJ20297), mRNA
685	10618	20442	4.33	8.0E-43	8923276	NT	Homo sapiens hypothetical protein FLJ20297 (FLJ20297), mRNA
685	10618	20443	4.33	8.0E-43	8923276	NT	Homo sapiens hypothetical protein FLJ20297 (FLJ20297), mRNA
3589	13503	23292	6.05	7.0E-43	AW248442.1	EST_HUMAN	2822251.5prime NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2822251 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7092	16969		1.76	7.0E-43	AI936748.1	EST_HUMAN	wp69601.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:246985 3' similar to TR:O15475 O15475 UNNAMED HERV-H PROTEIN ;contains LTR7.b1 LTR7 repetitive element ;
1320	11227		10.17	6.0E-43	AA491890.1	EST_HUMAN	ne72d06.s1 NCI_CGAP_Ew1 Homo sapiens cDNA clone IMAGE:909803 similar to gb:L06095 60S RIBOSOMAL PROTEIN L30 (HUMAN);
2547	12421		4.15	6.0E-43	AV708201.1	EST_HUMAN	AV708201 ADC Homo sapiens cDNA clone ADCACC10 5'
5811	15716	25829	2.02	6.0E-43	9955973	NT	Homo sapiens ATP-binding cassette, sub-family C (CFTR/MRP), member 3 (ABCC3), transcript variant MRP3B, mRNA
6128	15975	26111	2.02	6.0E-43	AW468897.1	EST_HUMAN	hd30b04.x1 Soares NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2910991 3' similar to contains MER1.13 MER1 MER1 repetitive element ;
7668	17518	27745	1.83	6.0E-43	AA195154.1	EST_HUMAN	zr35a06.r1 Soares_NhHMPu_S1 Homo sapiens cDNA clone IMAGE:665410 5' similar to TR:G529641 G529641 DB1, COMPLETE ODS, ;contains element PTR7 repetitive element ;
8449	18322		6.54	6.0E-43	AL119158.1	EST_HUMAN	DKFZp761L1712.r1 761 (synonym: hamy2) Homo sapiens cDNA clone DKFZp761L1712 5'
137	10111		1.98	5.0E-43	AL163213.2	NT	Homo sapiens chromosome 21 segment HS21C013
494	10437	20249	3.01	5.0E-43	AA392780.1	EST_HUMAN	EST96033 Testis 1 Homo sapiens cDNA 5' end
2816	12745	22839	1.36	5.0E-43	AV732578.1	EST_HUMAN	AV732578 HTF Homo sapiens cDNA clone HTFANC06 5'
7390	17308	27514	4.47	5.0E-43	AA465288.1	EST_HUMAN	aa33d08.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:815056 5'
7945	17795	28035	2.2	5.0E-43	A1733244.1	EST_HUMAN	o552c10.x6 NCI_CGAP_Lu6 Homo sapiens cDNA clone IMAGE:1569810 3' similar to TR:P90591 P90591 PV14 GENE. ;
7964	17814	28055	1.41	5.0E-43	AL049110.1	EST_HUMAN	DKFZp434D0119.r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434D0119
8145	18033	28280	5.46	5.0E-43	AW863007.1	EST_HUMAN	MR2-SN0007-290400-004-c02 SN0007 Homo sapiens cDNA
8338	18215	28468	2.67	5.0E-43	W29011.1	EST_HUMAN	55a4 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA
8753	17902	28146	2.6	5.0E-43	X15804.1	NT	Human mRNA for alpha-actinin
957	12643	20728	4.85	4.0E-43	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
6231	16097		1.72	4.0E-43	11416793	NT	Homo sapiens protocadherin beta 6 (PCDH6), mRNA
6757	16636	26824	4.49	4.0E-43	A1244341.1	EST_HUMAN	q76a02.x1 NCI_CGAP_Kid3 Homo sapiens cDNA clone IMAGE:1865354 3' similar to contains MER10.t3 MER10 repetitive element ;
6757	16636	26825	4.49	4.0E-43	A1244341.1	EST_HUMAN	q76a02.x1 NCI_CGAP_Kid3 Homo sapiens cDNA clone IMAGE:1865354 3' similar to contains MER10.t3 MER10 repetitive element ;
8624	18489	28761	1.8	4.0E-43	T77380.1	EST_HUMAN	yf72h10.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:113827 5'
9174	18915		1.89	4.0E-43	R20950.1	EST_HUMAN	yg06b05.r1 Soares infant brain 1NIB Homo sapiens cDNA clone IMAGE:31363 5' similar to contains MER10 repetitive element ;
1195	11105		2.84	3.0E-43	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1669	11571	21437	1.48	3.0E-43	X97869.1	NT	H.sapiens gene encoding La autoantigen
3524	13440	23237	1.05	3.0E-43	S69002.1	NT	AML1-EVI-1=AML1-EVI-1 fusion protein [rearranged translocation] [human, leukemic cell line SKH1, mRNA
4193	14093	23872	0.95	3.0E-43	AA548154.1	EST_HUMAN	Mutant, 5938 nt
5837	15743	25856	1.71	3.0E-43	7305360	NT	nk55d06.s1 NCI_CGAP_P77 Homo sapiens cDNA clone IMAGE:1017419
5837	15743	25856	1.71	3.0E-43	7305360	NT	Mus musculus otogelin (Otog), mRNA
6037	15940	26072	3.78	3.0E-43	U65487.1	NT	Mus musculus otogelin (Otog), mRNA
6746	16625		6.68	3.0E-43	AA458824.1	EST_HUMAN	Human ribosomal RNA upstream binding transcription factor (UBTF) gene, partial cds
7120	16997	27188	1.18	3.0E-43	7661721	NT	aa8f11.s1 Stratiene fetal retina 937202 Homo sapiens cDNA clone IMAGE:838413 3' similar to contains
8962	18769	29061	2.02	3.0E-43	5730038	NT	THR12 THR repetitive element;
177	10148		4.27	2.0E-43	A190764.1	EST_HUMAN	Homo sapiens SET domain and mariner transposase fusion gene (SETMAR) mRNA
6312	16175	26332	1.36	2.0E-43	AW207390.1	EST_HUMAN	cd61c09.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1733968 3' similar to contains PTR7.13
6836	16715		7.53	2.0E-43	U43701.1	NT	P TR7 PTR7 repetitive element;
8532	18404		3.38	2.0E-43	T03007.1	EST_HUMAN	UI-H-B1-afi-a-09-Q-U1.s1 NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2721712 3'
1630	11534	21394	2.92	1.0E-43	AF154936.1	NT	Human ribosomal protein L23a mRNA, complete cds
1630	11534	21395	2.92	1.0E-43	AF154936.1	NT	FB1G5 Fetal brain, Stratiene Homo sapiens cDNA clone FB1G5 3'end similar to LINE-1
1678	11580	21450	3.36	1.0E-43	AL163284.2	NT	Homo sapiens Rae-like GTP-binding protein (RAB27A) gene, exons 1b and 2
2692	12557	22444	4.95	1.0E-43	BF348283.1	EST_HUMAN	Homo sapiens Rae-like GTP-binding protein (RAB27A) gene, exons 1b and 2
5987	15892	26014	12.07	1.0E-43	4507168	NT	Homo sapiens chromosome 21 segment HS21C084
5987	15892	26015	12.07	1.0E-43	4507168	NT	G02022313F1 NCI_CGAP_Brn67 Homo sapiens cDNA clone IMAGE:4157666 5'
6159	15117	24860	1.63	1.0E-43	R19751.1	EST_HUMAN	Homo sapiens Sp4 transcription factor (SP4) mRNA
6700	16580		1.63	1.0E-43	AF198490.1	NT	Homo sapiens Sp4 transcription factor (SP4) mRNA
7129	17006	27199	25.23	1.0E-43	AW963676.1	EST_HUMAN	Yg40e01.r1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:34732 5' similar to
8331	18208	28458	6.75	1.0E-43	A1984961.1	EST_HUMAN	SP-BD38 MOUSE P28655 BRAIN PROTEIN DN38 ;
8672	18560	28844	3.2	1.0E-43	11424378	NT	Homo sapiens 8q22.1 region and MT38 (CBFA2T1) gene, partial cds
9117	18880		3.66	1.0E-43	AL137964.1	EST_HUMAN	EST375749 IMAGE resequences, MAGH Homo sapiens cDNA
9405	19058	25311	1.89	1.0E-43	A1675416.1	EST_HUMAN	wb87r01.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2494705 3'
9618	19196	25255	2.52	9.0E-44	11418322	NT	Homo sapiens calcium channel, voltage-dependent, alpha 1E subunit (CACNA1E), mRNA
872	10798	20648	5.98	8.0E-44	A1222985.1	EST_HUMAN	DKFZp761D1015_r1 761 (synonym: hamy2) Homo sapiens cDNA clone DKFZp761D1015 5'
872	10798	20649	5.98	8.0E-44	A1222985.1	EST_HUMAN	wb99b04.x1 NCI_CGAP_P28 Homo sapiens cDNA clone IMAGE:2313775 3'
6968	16845	27037	3.87	8.0E-44	X94354.1	NT	Homo sapiens cadherin EGF LAG seven-pass G-type receptor 1 (CELSR1), mRNA
							qh23g01.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1845552 3'
							qh23g01.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1845552 3'
							Hi.sapiens DNA for Cone cGMP-PDE gene

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8504	18377	28643	3.39	8.0E-44	Y10498.2	NT	Homo sapiens mRNA for thymidine kinase, partial
8935	18743	29038	5.06	8.0E-44	L29139.1	NT	Homo sapiens myosin mRNA, partial cds
9359	19031	25304	2.59	8.0E-44	11527389	NT	Homo sapiens polymerase (RNA) II (DNA directed) polypeptide F (POLR2F), mRNA
9400	19369	25191	1.89	8.0E-44	11418083	NT	Homo sapiens putative nuclear protein (HRIHFB2122), mRNA
9742	19532	25059	1.75	8.0E-44	11418093	NT	Homo sapiens protein kinase C, alpha binding protein (PRKCABP), mRNA
9885	19369	25191	1.84	8.0E-44	11418086	NT	Homo sapiens putative nuclear protein (HRIHFB2122), mRNA
643	10580		0.85	7.0E-44	R06035.1	EST_HUMAN	ye89e01.1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:124920 5'
2187	12074	21978	1.2	7.0E-44	5031886	NT	Homo sapiens LIM domain-containing preferred translocation partner in lipoma (LPP), mRNA
2937	12864	22663	2.2	7.0E-44	AF048729.1	NT	Homo sapiens minisatellite ms32 repeat region
2937	12864	22664	2.2	7.0E-44	AF048729.1	NT	Homo sapiens minisatellite ms32 repeat region
3786	13698	23485	2.28	7.0E-44	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
4148	14048	23821	1.17	7.0E-44	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
4148	14048	23822	1.17	7.0E-44	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
6762	16641	26828	2.05	7.0E-44	AU159839.1	EST_HUMAN	AU159839 Y79AA1 Homo sapiens cDNA clone Y79AA1000496 3'
8986	18791	29080	2.51	6.0E-44	AW954050.1	EST_HUMAN	EST368120 MAGC resequences, MAGC Homo sapiens cDNA
300	10264		2.52	5.0E-44	AJ289880.1	NT	Homo sapiens KIAA0851 gene (partial), X13 gene and LZTFL1 gene
329	10288		2.04	5.0E-44	AJ289880.1	NT	Homo sapiens KIAA0851 gene (partial), X13 gene and LZTFL1 gene
6805	16485	26672	3.79	5.0E-44	AI568523.1	EST_HUMAN	tn40d02.X1 NCI_CGAP_Brn25 Homo sapiens cDNA clone IMAGE:2170083 3' similar to contains OFR.t1
7399	17317		2.59	5.0E-44	AU124571.1	EST_HUMAN	OFR OFR repetitive element;
3368	13287	23086	2.9	4.0E-44	AL163303.2	NT	AU124571 NT2RM4 Homo sapiens cDNA clone NT2RM4000218 5'
8564	18433	28702	13.3	4.0E-44	U90878.1	NT	Homo sapiens chromosome 21 segment HS21C103
1746	11646		1.07	3.0E-44	6912477	NT	Homo sapiens carboxyl terminal LIM domain protein (CLIM1) mRNA, complete cds
2485	12360	22254	1.54	3.0E-44	BE880626.1	EST_HUMAN	Homo sapiens karyopherin alpha 6 (importin alpha 7) (KPNA6), mRNA
3059	12986	22777	5.08	3.0E-44	AA169851.1	EST_HUMAN	G01491529F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3893639 5'
1033	10951	20793	2.75	2.0E-44	4826685	NT	zp18b05.r1 Stratiogene fetal retina 937202 Homo sapiens cDNA clone IMAGE:609777 5'
1033	10951	20794	2.75	2.0E-44	4826685	NT	Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 1 (DDX1) mRNA
1189	11099	20945	4.63	2.0E-44	5803200	NT	Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 1 (DDX1) mRNA
1189	11099	20946	4.63	2.0E-44	5803200	NT	Homo sapiens transmembrane trafficking protein (TMP21), mRNA
1290	11197	21052	2.79	2.0E-44	AF133588.1	NT	Homo sapiens transmembrane trafficking protein (TMP21), mRNA
1346	11252	21108	1.43	2.0E-44	BE465325.1	EST_HUMAN	Homo sapiens RAB36 (RAB36) mRNA, complete cds
2105	11994	21894	2.03	2.0E-44	AF070651.1	NT	hw14g06.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3182938 3' similar to SW:OXYB_HUMAN
2529	12403	22294	1.1	2.0E-44	D25303.1	NT	P22059 OXYSTEROL-BINDING PROTEIN.;
							Homo sapiens tissue-type bone marrow zinc finger protein 4 mRNA, complete cds
							Human mRNA for integrin alpha subunit, complete cds

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2567	12438		3.32	2.0E-44	5901933	NT	Homo sapiens adaptor-related protein complex 4, sigma 1 subunit (CLAPS4), mRNA
3425	13342	23147	1.36	2.0E-44	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
4468	14362	24152	1.76	2.0E-44	AW864379.1	EST_HUMAN	PM4-SN0016-120500-003-a04 SN0016 Homo sapiens cDNA
5709	15617	25719	1.39	2.0E-44	11449901	NT	Homo sapiens chemokine (C-C motif) receptor 9 (CCR9), mRNA
6097	15107	24870	1.46	2.0E-44	AF038988.1	NT	Homo sapiens general transcription factor 2-I (GTF2I) mRNA, alternatively spliced product, complete cds
6383	16245	26406	3.86	2.0E-44	11419226	NT	Homo sapiens glutamate receptor, metabotropic 3 (GRM3), mRNA
6383	16245	26407	3.86	2.0E-44	11419226	NT	Homo sapiens glutamate receptor, metabotropic 3 (GRM3), mRNA
7009	16886	27078	1.88	2.0E-44	BE389058.1	EST_HUMAN	601286914F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3613586 5'
9022	18816		2.22	2.0E-44	BE244902.1	EST_HUMAN	TCBAP1E2795 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP2795
9710	19735	24910	2.72	2.0E-44	AB002374.1	NT	Human mRNA for KIAA0376 gene, partial cds
9906	19383		1.38	2.0E-44	11526283	NT	Homo sapiens cat eye syndrome chromosome region, candidate 1 (CECR1), mRNA
46	10034	19839	3.64	1.0E-44	7657334	NT	Homo sapiens MissshapenNIK-related kinase (MLINK), mRNA
46	10034	19840	3.64	1.0E-44	7657334	NT	Homo sapiens MissshapenNIK-related kinase (MLINK), mRNA
586	10505	20312	1.85	1.0E-44	AW853132.1	EST_HUMAN	RC1-CT0249-030300-026-h12 CT0249 Homo sapiens cDNA
1179	11090		1.52	1.0E-44	AW984803.1	EST_HUMAN	RC1-BN0039-110300-012-b01 BN0039 Homo sapiens cDNA
1555	11460		5.54	1.0E-44	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
2177	12064	21965	3.53	1.0E-44	AA434554.1	EST_HUMAN	zw53d02.r1 Soares_total_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:773763 5' similar to contains THR.t3 THR repetitive element ;
2177	12064	21966	3.53	1.0E-44	AA434554.1	EST_HUMAN	zw53d02.r1 Soares_total_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:773763 5' similar to contains THR.t3 THR repetitive element ;
2237	12716	22024	1.05	1.0E-44	AA398099.1	EST_HUMAN	z188g11.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:729476 5'
2732	12594	22489	1.39	1.0E-44	AF196779.1	NT	Homo sapiens transcription factor IGHM enhancer 3, JM11 protein, JM4 protein, JM5 protein, T54 protein, JM10 protein, A4 differentiation-dependent protein, triple LIM domain protein 6, and synaptophysin genes, complete cds; and L-type calcium channel a>
3664	13578		5.08	1.0E-44	AA458689.1	EST_HUMAN	aa01c09.s1 Soares_NhlHMPu_S1 Homo sapiens cDNA clone IMAGE:811984 3'
5061	14931	24702	0.81	1.0E-44	AJ130755.1	NT	Homo sapiens alpha satellite DNA, M1 monomer type
5061	14931	24703	0.81	1.0E-44	AJ130755.1	NT	Homo sapiens alpha satellite DNA, M1 monomer type
8378	18255		10.75	1.0E-44	AV714608.1	EST_HUMAN	AV714608 DCB Homo sapiens cDNA clone DCBBYE03 5'
8816	18529	28918	4.18	1.0E-44	10092664	NT	Homo sapiens Susst domain (SCR repeat) containing (BK65A6.2), mRNA
8869	18681	28970	3.43	1.0E-44	AW846967.1	EST_HUMAN	RC1-CT0198-150999-011-C08 CT0198 Homo sapiens cDNA
8869	18681	28971	3.43	1.0E-44	AW846967.1	EST_HUMAN	RC1-CT0198-150999-011-C08 CT0198 Homo sapiens cDNA
4476	14370	24159	1.74	9.0E-45	8922331	NT	Homo sapiens hypothetical protein FLJ10379 (FLJ10379), mRNA

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Table 4
Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4476	14370	24160	1.74	9.0E-45	8922391	NT	Homo sapiens hypothetical protein FLJ10379 (FLJ10379), mRNA
2477	12353	22245	3.9	8.0E-45	5174718	NT	Homo sapiens TRK-fused gene (NOTE: non-standard symbol and name) (TFG) mRNA
5015	14889	24656	7.49	8.0E-45	5174718	NT	Homo sapiens TRK-fused gene (NOTE: non-standard symbol and name) (TFG) mRNA
3896	13806		5.25	6.0E-45	AW157570.1	EST_HUMAN	au83h07.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2782909 3' similar to
9707	19718		1.46	6.0E-45	11418213	NT	SW:R13A_HUMAN P40429 60S RIBOSOMAL PROTEIN L13A ;
874	10800		1.11	5.0E-45	AL163203.2	NT	Homo sapiens ADP-ribosylation factor GTPase activating protein 1 (ARFGAP1), mRNA
1957	11852	21739	5.01	5.0E-45	BF333627.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C003
3173	13098	22904	2.01	5.0E-45	AL523766.1	EST_HUMAN	CM4-CN0044-180200-515-01 CN0044 Homo sapiens cDNA
5384	15303	25155	8.83	5.0E-45	AA397781.1	EST_HUMAN	tg94f07.x1 NCL CGAP CLL1 Homo sapiens cDNA clone IMAGE:2116463 3' similar to SW:PAX1_MOUSE
7226	17103	27292	1.67	5.0E-45	4759223	NT	P09084 PAIRED BOX PROTEIN PAX-1 ;
8940	18748	29043	2.67	5.0E-45	8923698	NT	z172403.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:727877 3' similar to contains element
1127	11041	20983	8.96	4.0E-45	X95826.1	NT	TAR1 repetitive element ;
2246	12130	22027	1.98	4.0E-45	BE265622.1	EST_HUMAN	Homo sapiens golgi autoantigen, golgin subfamily a, 2 (GOLGA2) mRNA
9613	19192		1.62	4.0E-45	BF676077.1	EST_HUMAN	Homo sapiens programmed cell death 5 (PDCD5), mRNA
3997	13210		1.17	3.0E-45	T71480.1	EST_HUMAN	Homo sapiens golgin-like protein (GLP), mRNA
6920	16798		1.51	3.0E-45	AV723976.1	EST_HUMAN	H.sapiens ART4 gene
7104	16981	27173	3.44	3.0E-45	4758451	NT	60119440F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3538425 5'
7907	17757	27966	8.37	3.0E-45	AL163227.2	NT	602084052F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4248253 5'
7907	17757	27997	8.37	3.0E-45	AL163227.2	NT	vd35f07.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:110245 5'
9814	19660		1.33	3.0E-45	X89211.1	NT	AV723976 HTB Homo sapiens cDNA clone HTBAAG01 5'
2454	12331		2.17	2.0E-45	AL163218.2	NT	Homo sapiens DNA for endogenous retroviral like element
2996	12924	22716	0.93	2.0E-45	AJ243213.1	NT	Homo sapiens chromosome 21 segment HS21C018
5929	15834	25957	4.82	2.0E-45	L01665.1	NT	Homo sapiens partial 5-HT4 receptor gene, exons 2 to 5
6489	16347	26516	1.75	2.0E-45	BE762184.1	EST_HUMAN	Human eosinophil Charcot-Leyden crystal (CLC) protein (lysophospholipase) gene, promoter and exon 1
8179	19471	28315	27.64	2.0E-45	BE934350.1	EST_HUMAN	601467793F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3870638 5'
8516	18388	28652	3.96	2.0E-45	AA458770.1	EST_HUMAN	MIR0-HT0923-190800-201-a02 HT0923 Homo sapiens cDNA
8794	18608	28898	2.13	2.0E-45	AW270280.1	EST_HUMAN	aa87f12.1 Stratiagene fetal retina 937202 Homo sapiens cDNA clone IMAGE:338319 5' similar to
8794	18608	28899	2.13	2.0E-45	AW270280.1	EST_HUMAN	TR:G1144569 G1144569 R-SLY1 ;
9853	18346		2.76	2.0E-45	11418157	NT	xp72a03.x1 NCL CGAP_Ow40 Homo sapiens cDNA clone IMAGE:2745868 3'
							xp72a03.x1 NCL CGAP_Ow40 Homo sapiens cDNA clone IMAGE:2745868 3'
							Homo sapiens calcium channel, voltage-dependent, alpha 1I subunit (CACNA1I), mRNA

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
118	10349		2.22	1.0E-45	BE389855.1	EST_HUMAN	601284360F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3606183 5'
403	10349		2.7	1.0E-45	BE389855.1	EST_HUMAN	601284360F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3606183 5'
464	10407	20227	1.5	1.0E-45	4506412	NT	Homo sapiens RAP1A, member of RAS oncogene family (RAP1A), mRNA
1157	11070	20915	1.7	1.0E-45	7657290	NT	Homo sapiens Langerhans cell specific c-type lectin (LANGERIN), mRNA
3065	12992	22784	6.76	1.0E-45	U32169.1	NT	Human pro-a2 chain of collagen type XI (COL11A2) gene, complete cds
3447	13384	23171	1.04	1.0E-45	8659558	NT	Homo sapiens chromosome 21 open reading frame 1 (C21orf4), mRNA
3526	13442	23239	0.81	1.0E-45	AB04681.1	NT	Homo sapiens mRNA for KIAA1561 protein, partial cds
4378	14274	24055	4.08	1.0E-45	BE396633.1	EST_HUMAN	601289116F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3619803 5'
4884	14765	24541	1.05	1.0E-45	11545796	NT	Homo sapiens nilban protein (NIBAN), mRNA
7274	17161	27347	5.22	1.0E-45	BE887843.1	EST_HUMAN	601511226F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3912535 5'
7485	17355	27559	1.25	1.0E-45	AB002297.1	NT	Human mRNA for KIAA0299 gene, partial cds
9231	18950	25358	4.3	1.0E-45	11418099	NT	Homo sapiens protein kinase C, alpha binding protein (PRKCABP), mRNA
9415	19067		5.38	1.0E-45	11526291	NT	Homo sapiens hypothetical protein FLJ20454 (FLJ20454), mRNA
9421	19070		2.56	1.0E-45	11418177	NT	Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA
9820	19324	25207	3.17	1.0E-45	11418157	NT	Homo sapiens calcium channel, voltage-dependent, alpha 11 subunit (CACNA11), mRNA
6790	16689	26861	2.28	9.0E-46	9910293	NT	Mus musculus keratin complex 2, gene 6g (Krt2-6g), mRNA
7018	16895		6.71	9.0E-46	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
7986	17836	28077	7.89	9.0E-46	AW246964.1	EST_HUMAN	2822449.5prime NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2822449 5'
2392	12270	22165	8.79	8.0E-46	AI433261.1	EST_HUMAN	ti32f08.x1 NCL_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2132199 3' similar to gb:J00314_ma2
2392	12270	22166	8.79	8.0E-46	AI433261.1	EST_HUMAN	TUBULIN BETA-1 CHAIN (HUMAN);
6692	16572		3.97	8.0E-46	BE167244.1	EST_HUMAN	RC6-HT0506-280200-012-C12 HT0506 Homo sapiens cDNA
4478	14372		6.54	7.0E-46	BE386165.1	EST_HUMAN	601277292F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3618119 5'
4701	14587		1.01	7.0E-46	BE064386.1	EST_HUMAN	RC4-BT0310-110300-015-f10 BT0310 Homo sapiens cDNA
5683	15592	25693	4.01	7.0E-46	8922708	NT	Homo sapiens hypothetical protein FLJ10847 (FLJ10847), mRNA
5912	15818	25943	1.35	7.0E-46	BF105845.1	EST_HUMAN	601822835F1 NIH_MGC_77 Homo sapiens cDNA clone IMAGE:4042736 5'
9543	19144		1.35	7.0E-46	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
2726	12588	22483	5.53	6.0E-46	AI884381.1	EST_HUMAN	wm31f08.x1 NCL_CGAP_Ut4 Homo sapiens cDNA clone IMAGE:2437575 3' similar to contains MER19.t2
2726	12588	22484	5.53	6.0E-46	AI884381.1	EST_HUMAN	MER19 repetitive element ;
5727	15634	25737	8.85	6.0E-46	AI635448.1	EST_HUMAN	wm31f08.x1 NCL_CGAP_Ut4 Homo sapiens cDNA clone IMAGE:2437575 3' similar to contains MER19.t2
							ts58h10.x1 NCL_CGAP_Kid8 Homo sapiens cDNA clone IMAGE:2232835 3' similar to TR:O60363 O60363
							SA SE. ;

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8694	17878		3.03	6.0E-46	BE784971.1	EST_HUMAN	601478409F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3880995 5'
197	10169		6.41	5.0E-46	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
3484	13400	23205	1.12	5.0E-46	BE677194.1	EST_HUMAN	7d81g01.x1 Lupski_dorsal_root_ganglion Homo sapiens cDNA clone IMAGE:3279408 3'
3484	13400	23206	1.12	5.0E-46	BE677194.1	EST_HUMAN	7d81g01.x1 Lupski_dorsal_root_ganglion Homo sapiens cDNA clone IMAGE:3279408 3'
8039	15942	26074	1.79	5.0E-46	BF590442.1	EST_HUMAN	naa38f07.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3258757 3' similar to TR:O75202
6144	16017	26155	3.52	5.0E-46	BF347229.1	EST_HUMAN	O75202 HOMOLOG OF RAT KIDNEY-SPECIFIC ;
625	10562		1.51	4.0E-46	AA601143.1	EST_HUMAN	602021164F1 NCI_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4156670 5'
1676	11578	21446	3.57	4.0E-46	AW770544.1	EST_HUMAN	no54e09.s1 NCI_CGAP_SS1 Homo sapiens cDNA clone IMAGE:1104520 3' similar to gb:X53741_rna1 FIBULIN-1, ISOFORM A PRECURSOR (HUMAN);
1676	11578	21447	3.57	4.0E-46	AW770544.1	EST_HUMAN	h186c03.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3008836 3' similar to gb:X14008_rna1 LYSOZYME C PRECURSOR (HUMAN); contains element MER37 repetitive element ;
2710	12573	22464	3.55	4.0E-46	M18048.1	NT	Human endogenous retrovirus RTVL-H2
4320	14217	23969	1.07	4.0E-46	AB014522.1	NT	Homo sapiens mRNA for KIAA0622 protein, partial cds
4320	14217	24000	1.07	4.0E-46	AB014522.1	NT	Homo sapiens mRNA for KIAA0622 protein, partial cds
5338	15258	25082	1.84	4.0E-46	M36852.1	NT	Human Ig germline gamma-3 heavy-chain gene V region, partial cds
5338	15258	25083	1.84	4.0E-46	M36852.1	NT	Human Ig germline gamma-3 heavy-chain gene V region, partial cds
9660	19221	25237	1.91	4.0E-46	AB002059.1	NT	Homo sapiens DNA for Human P2XM, complete cds
4294	14192	23976	0.8	3.0E-46	4506376	NT	Homo sapiens mitogen-activated protein kinase kinase 3 (MAP4K3), mRNA
4666	14552	24343	1.13	3.0E-46	Z73660.1	NT	H. sapiens Ig lambda light chain variable region gene (7c.11.2) germline; Ig-Lambda; VLambda
4666	14552	24344	1.13	3.0E-46	Z73660.1	NT	H. sapiens Ig lambda light chain variable region gene (7c.11.2) germline; Ig-Lambda; VLambda
7081	16958	27151	8.3	3.0E-46	AI831452.1	EST_HUMAN	wj49c04.x1 NCI_CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2406150 3' similar to contains THR.b2 THR repetitive element ;
8866	18668	28955	2.63	3.0E-46	D31785.1	NT	Human mRNA for KIAA0061 gene, partial cds
819	10747	20594	5.91	2.0E-46	AA468046.1	EST_HUMAN	ne06a09.s1 NCI_CGAP_Cc3 Homo sapiens cDNA clone IMAGE:880408 3' similar to contains THR.b2 THR repetitive element ;
1542	11447		1.32	2.0E-46	AA678246.1	EST_HUMAN	z17a11.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:431996 3'
1623	11527	21385	2.43	2.0E-46	U78027.1	NT	Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein (L44L) and FTP3 (FTP3) genes, complete cds

Table 4

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4899	14779	24555	1.15	2.0E-46	AA399286.1	EST_HUMAN	z159a02.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:726650 5' similar to SW.RSP1_MOUSE
6418	10280	26442	6.78	2.0E-46	9910569	NT	Q01730 RSP-1 PROTEIN. ;
6703	16583		1.17	2.0E-46	BE869151.1	EST_HUMAN	Mus musculus sperm tail associated protein (Slap), mRNA
8571	18439		1.87	2.0E-46	7657233	NT	601445137F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3849297 5'
9157	19629		1.75	2.0E-46	BF028854.1	EST_HUMAN	Homo sapiens small acidic protein (IMAGE:145052), mRNA
9409	19525		1.44	2.0E-46	H48391.1	EST_HUMAN	601765225F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3997326 5'
9728	19515	25136	3.81	2.0E-46	AW277214.1	EST_HUMAN	yr32d01.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:206977 5'
1213	11121	20970	5.19	1.0E-46	4502894	NT	xq78h03.x1 NCL_CGAP_Lu34 Homo sapiens cDNA clone IMAGE:2756789 3'
2236	12121	22023	4.6	1.0E-46	AW978516.1	EST_HUMAN	Homo sapiens cell division cycle 10 (homologous to CDC10 of S. cerevisiae) (CDC10) mRNA
2351	12231	22128	2.59	1.0E-46	H97930.1	EST_HUMAN	EST48b095 WATM1 Homo sapiens cDNA clone 48b095
3211	13135	22936	2.81	1.0E-46	AA631912.1	EST_HUMAN	np78b02.s1 NCL_CGAP_P2 Homo sapiens cDNA clone IMAGE:1132395 similar to gb.X76717 H.sapiens MT-11 mRNA. (HUMAN);
4772	14656		2.64	1.0E-46	AB023197.1	NT	Homo sapiens mRNA for KIAA0980 protein, partial cds
5495	15414	25477	4.18	1.0E-46	BF194707.1	EST_HUMAN	7c92b01.x1 NCL_CGAP_Ov18 Homo sapiens cDNA clone IMAGE:3643705 3'
5636	19449	25639	5.66	1.0E-46	8923762	NT	Homo sapiens centaurin-alpha 2 protein (HSA272195), mRNA
5636	19449	25640	5.66	1.0E-46	8923762	NT	Homo sapiens centaurin-alpha 2 protein (HSA272195), mRNA
8236	16414	25477	4.26	1.0E-46	BF194707.1	EST_HUMAN	7c92b01.x1 NCL_CGAP_Ov18 Homo sapiens cDNA clone IMAGE:3643705 3'
9188	18923	25348	1.43	1.0E-46	BF531102.1	EST_HUMAN	602072264F1 NCL_CGAP_Brn67 Homo sapiens cDNA clone IMAGE:4215398 5'
9188	18923	25349	1.43	1.0E-46	BF531102.1	EST_HUMAN	602072264F1 NCL_CGAP_Brn67 Homo sapiens cDNA clone IMAGE:4215398 5'
9925	19397		1.53	1.0E-46	AV715377.1	EST_HUMAN	AV715377 DCB Homo sapiens cDNA clone DCBAIE03 5'
749	10679		4.51	9.0E-47	AJ271735.1	NT	Homo sapiens Xq pseudoautosomal region; segment 1/2
4848	14729	24512	2.61	9.0E-47	AW770928.1	EST_HUMAN	H93e04.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3009534 3' similar to TR:O75703 O75703
9682	19617	25001	1.84	9.0E-47	11417966	NT	HYPOTHETICAL 12.4 KD PROTEIN. ;
1766	11665	21539	14.02	8.0E-47	Y18536.1	NT	Homo sapiens SEC14 (S. cerevisiae)-like 2 (SEC14L2), mRNA
1766	11665	21540	14.02	8.0E-47	Y18536.1	NT	Homo sapiens HLA-C gene, exon 5, individual 19323
2684	12549	22439	1.74	8.0E-47	5453955	NT	Homo sapiens HLA-C gene, exon 5, individual 19323
2989	12917	22712	1.72	8.0E-47	AJ229043.1	NT	Homo sapiens protein phosphatase 2, regulatory subunit B (B56), epsilon isoform (PPP2R5E) mRNA
2501	12376	22266	3.05	6.0E-47	AL163246.2	NT	Homo sapiens 959 kb config between AML1 and CBR1 on chromosome 21q22, segment 3/3
7344	17212	27411	6.27	6.0E-47	AI695189.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C046
5963	15868	25990	5.27	5.0E-47	11423972	NT	tz98h02.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2296659 3'
8174	18062		3.91	5.0E-47	M78590.1	EST_HUMAN	Homo sapiens ODC37 (cell division cycle 37, S. cerevisiae, homolog) (ODC37), mRNA
							EST00738 Fetal brain, Striatogene (cat#936206) Homo sapiens cDNA clone HFBFCF07

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Table 4

Single Exon Probes Expressed In Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1379	11284	21140	3.41	4.0E-47	4557556	NT	Homo sapiens E1A binding protein p300 (EP300) mRNA
6938	16816	27008	2.06	4.0E-47	BE616483.1	EST_HUMAN	601280486F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3622437 5'
6938	16816	27009	2.06	4.0E-47	BE616483.1	EST_HUMAN	601280486F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3622437 5'
8905	18713		4.84	4.0E-47	AW515509.1	EST_HUMAN	xx66b07.x1 NCL_CGAP_Lym12 Homo sapiens cDNA clone IMAGE:2848597 3' similar to SW:INT6_MOUSE
532	10474	20287	1.75	3.0E-47	BE907634.1	EST_HUMAN	Q64252 VIRAL INTEGRATION SITE PROTEIN INT-6. [1];
532	10474	20288	1.75	3.0E-47	BE907634.1	EST_HUMAN	601497639F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3899721 5'
801	10730	20571	5.17	3.0E-47	N57483.1	EST_HUMAN	601497639F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3899721 5'
930	10855	20703	8.9	3.0E-47	AL163284.2	NT	y54b04.s1 Soares_multiple_sclerosis_2NblHMSF Homo sapiens cDNA clone IMAGE:277327 3'
1984	11877	21770	1.5	3.0E-47	AB007899.1	NT	Homo sapiens chromosome 21 segment HS21C084
3885	13796		4.99	3.0E-47	U93181.1	NT	Homo sapiens KIAA0439 mRNA, partial cds
4265	14164	23941	0.97	3.0E-47	M12959.1	NT	Homo sapiens nuclear dual-specificity phosphatase (SDF1) mRNA, partial cds
5659	15571	25666	4.26	3.0E-47	AW408800.1	EST_HUMAN	Human T-cell receptor active alpha-chain mRNA from JM cell line, complete cds
5659	15571	25667	4.26	3.0E-47	AW408800.1	EST_HUMAN	UI-HF-BM0-act-d-07-0-U1.r1 NIH_MGC_38 Homo sapiens cDNA clone IMAGE:3063205 5'
5953	15858		1.89	3.0E-47	A1222413.1	EST_HUMAN	UI-HF-BM0-act-d-07-0-U1.r1 NIH_MGC_38 Homo sapiens cDNA clone IMAGE:3063205 5'
142	10116	19936	4.27	2.0E-47	4505318	NT	q04e07.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1843716 3'
952	10876	20722	2.18	2.0E-47	AL163209.2	NT	Homo sapiens myosin phosphatase, target subunit 2 (MYPT2), mRNA
952	10876	20723	2.18	2.0E-47	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
1548	11453		1.18	2.0E-47	A1969279.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C009
1575	11479	21338	1.22	2.0E-47	7662109	NT	Homo sapiens chromosome 21 segment HS21C009
1654	11557	21420	4.44	2.0E-47	AA524514.1	EST_HUMAN	wq96b02.x1 NCL_CGAP_GC6 Homo sapiens cDNA clone IMAGE:2479851 3'
2185	12072	21974	2.3	2.0E-47	AF060588.1	EST_HUMAN	Homo sapiens KIAA0426 gene product (KIAA0426), mRNA
4251	14150	23924	1.66	2.0E-47	4504866	NT	ng43h12.s1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937607 3'
4287	14186	23967	1.75	2.0E-47	AA569592.1	EST_HUMAN	Homo sapiens promyelocytic leukemia zinc finger protein (PLZF) gene, complete cds
4287	14186	23968	1.75	2.0E-47	AA569592.1	EST_HUMAN	Homo sapiens ring finger protein (C3HC4 type 8 (RNIF8), mRNA
4406	14300	24084	2.06	2.0E-47	5174648	NT	nf23g07.s1 NCL_CGAP_P11 Homo sapiens cDNA clone IMAGE:914652
4707	14593	24384	1.1	2.0E-47	AW965166.1	EST_HUMAN	nf23g07.s1 NCL_CGAP_P11 Homo sapiens cDNA clone IMAGE:914652
5635	15549	25637	1.6	2.0E-47	BE778475.1	EST_HUMAN	Homo sapiens Rev/Rex activation domain binding protein-related (RAB-R) mRNA
5635	15549	25638	1.6	2.0E-47	BE778475.1	EST_HUMAN	EST377238 IMAGE resequences, MAGI Homo sapiens cDNA
6532	19464		1.33	2.0E-47	L09731.1	NT	601463932F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3867487 5'
6643	16523	26716	2.1	2.0E-47	D87675.1	NT	601463932F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3867487 5'
6643	16523	26717	2.1	2.0E-47	D87675.1	NT	Homo sapiens 5-hydroxytryptamine 1D receptor pseudogene with an Alu repeat insertion
7060	16937	27127	1.77	2.0E-47	AF071771.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
9070	10116	19936	5.77	2.0E-47	4505318	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
							Homo sapiens SPH-binding factor mRNA, partial cds
							Homo sapiens myosin phosphatase, target subunit 2 (MYPT2), mRNA

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Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9219	19658	24988	1.98	2.0E-47	R42423.1	EST_HUMAN	y92s08.s1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:29966 3' similar to contains OFR repetitive element;
9257	19659		1.32	2.0E-47	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
1383	11288	21142	4.5	1.0E-47	A1333429.1	EST_HUMAN	qp9h03.x1 Soares fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:1931189 3'
3749	13662	23443	0.79	1.0E-47	BE280477.1	EST_HUMAN	601155321F1 NIH_MGC 21 Homo sapiens cDNA clone IMAGE:3138893 5'
3749	13662	23444	0.79	1.0E-47	BE280477.1	EST_HUMAN	601155321F1 NIH_MGC 21 Homo sapiens cDNA clone IMAGE:3138893 5'
5008	14882	24648	2.59	1.0E-47	AW813906.1	EST_HUMAN	RC3-ST0197-130400-017-h02 ST0197 Homo sapiens cDNA
6194	15954	26086	7.68	1.0E-47	A1880886.1	EST_HUMAN	at19s03.x1 Barstead aorta HPLRB6 Homo sapiens cDNA clone IMAGE:2355586 3' similar to gb:M22995
7928	17778	28017	1.75	1.0E-47	L30115.1	NT	RAS-RELATED PROTEIN RAP-1A (HUMAN); Papio hamadryas alcohol dehydrogenase class I (ADH) gene, 5' region
1595	11499	21358	2.34	9.0E-48	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
3509	13425	23228	0.83	9.0E-48	BF359947.1	EST_HUMAN	CM2-MT0100-310700-290-05 MT0100 Homo sapiens cDNA
8460	18333	28595	3.22	9.0E-48	BE393813.1	EST_HUMAN	601310479F1 NIH_MGC 44 Homo sapiens cDNA clone IMAGE:3632083 5'
1230	11138		1.32	8.0E-48	4501900	NT	Homo sapiens aminocyclase 1 (ACY1). mRNA
1231	11138		1.51	8.0E-48	4501900	NT	Homo sapiens aminocyclase 1 (ACY1). mRNA
3096	13023	22818	3.62	8.0E-48	AW768477.1	EST_HUMAN	hk61b03.x1 NCI_CGAP_Lym12 Homo sapiens cDNA clone IMAGE:3001133 3' similar to gb:X64707
3096	13023	22819	3.62	8.0E-48	AW768477.1	EST_HUMAN	BREAST BASIC CONSERVED PROTEIN 1 (HUMAN);
482	10426		1.37	7.0E-48	AB033035.1	NT	hk61b03.x1 NCI_CGAP_Lym12 Homo sapiens cDNA clone IMAGE:3001133 3' similar to gb:X64707
483	10426		13.37	7.0E-48	AB033035.1	NT	BREAST BASIC CONSERVED PROTEIN 1 (HUMAN);
1492	11387	21250	1.12	7.0E-48	6912719	NT	Homo sapiens mRNA for KIAA1209 protein, partial cds
1620	11524	21382	3.49	7.0E-48	5730038	NT	Homo sapiens mRNA for KIAA1209 protein, partial cds
5947	15852	25975	22.88	7.0E-48	11416831	NT	Homo sapiens toulecl-like kinase 1 (TLK1). mRNA
7275	17152	27348	1.52	6.0E-48	AF026816.1	NT	Homo sapiens SET domain and mariner transposase fusion gene (SETMAR) mRNA
7500	17370	27577	1.9	6.0E-48	11427428	NT	Homo sapiens histidyl-tRNA synthetase (HARS). mRNA
7587	17438	27654	3.38	6.0E-48	AA189080.1	EST_HUMAN	Homo sapiens putative oncogene protein mRNA, partial cds
3269	15067	22989	1.39	5.0E-48	4826891	NT	Homo sapiens hypothetical protein FLJ11006 (FLJ11006). mRNA
8325	18202	28451	3.55	4.0E-48	A1620420.1	EST_HUMAN	zq45b06.s1 Stratagene hNT neuron (#937233) Homo sapiens cDNA clone IMAGE:632627 3' similar to contains Alu repetitive element;
1363	11269	21124	0.92	3.0E-48	AV690964.1	EST_HUMAN	Homo sapiens phosphodiesterase 1A, calmodulin-dependent (PDE1A) mRNA
1933	11828	21710	18.97	3.0E-48	4885170	NT	tu47a02.x1 NCI_CGAP_P128 Homo sapiens cDNA clone IMAGE:2254154 3'
1933	11828	21711	18.97	3.0E-48	4885170	NT	AV690964 GKC Homo sapiens cDNA clone GKCDRE12 5'
							Homo sapiens chromosome X open reading frame 6 (CXORF6) mRNA
							Homo sapiens chromosome X open reading frame 6 (CXORF6) mRNA

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3579	13493	23284	0.88	3.0E-48	AW684531.1	EST_HUMAN	h141412.x1 NCI CGAP GU1 Homo sapiens cDNA clone IMAGE:2972285 3' similar to SW:DCRB_HUMAN
5592	15507	25562	2.35	3.0E-48	BE084571.1	EST_HUMAN	P56555 DOWN SYNDROME CRITICAL REGION PROTEIN B. ;
6889	16768		2.86	3.0E-48	AA659930.1	EST_HUMAN	MR4-BT0657-060400-201-e10 BT0657 Homo sapiens cDNA
8248	18128	28376	7.08	3.0E-48	BF514170.1	EST_HUMAN	inv03f05.s1 NCI CGAP_P122 Homo sapiens cDNA clone IMAGE:1219137 3' similar to contains PTR5.b1
39	10027	19827	1.18	2.0E-48	AA631940.1	EST_HUMAN	PTR5 repetitive element ;
4431	14326	24114	1.35	2.0E-48	BE246055.1	EST_HUMAN	UI-H-BW1-ani-a-10-0-UJ.s1 NCI CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3082267 3'
5553	15469	25539	72.29	2.0E-48	AA613171.1	EST_HUMAN	fmfc7 Regional genomic DNA specific cDNA library Homo sapiens cDNA clone CR17-26
5553	15469	25540	72.29	2.0E-48	AA613171.1	EST_HUMAN	TCBAP1D3842 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP3842
6440	16301	26464	4.29	2.0E-48	AB040934.1	NT	nc18g01.s1 NCI CGAP_Phet1 Homo sapiens cDNA clone IMAGE:1101072 3'
6440	16301	26465	4.29	2.0E-48	AB040934.1	NT	nc18g01.s1 NCI CGAP_Phet1 Homo sapiens cDNA clone IMAGE:1101072 3'
6447	16308	26473	2.9	2.0E-48	11496238	NT	Homo sapiens mRNA for KIAA1501 protein, partial cds
6864	16743	26936	2.39	2.0E-48	AV743451.1	EST_HUMAN	Homo sapiens v-rel avian reticuloendotheliosis viral oncogene homolog A (nuclear factor of kappa light polypeptide gene enhancer in B-cells 3 (p65)) (RELA), mRNA
9184	15082	24828	2.45	2.0E-48	AA465007.1	EST_HUMAN	AV743451 CB Homo sapiens cDNA clone CBCCGG10 5'
9511	19579	25070	1.63	2.0E-48	BE737154.1	EST_HUMAN	z80c03.r1 Soares ovary tumor NBH0T Homo sapiens cDNA clone IMAGE:810052 5'
50	10037	19844	0.85	1.0E-48	77066534	NT	601305064F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3639782 5'
855	10782	20632	6.93	1.0E-48	4502166	NT	Homo sapiens cisplatin resistance-associated overexpressed protein (LOC51747), mRNA
1274	11182	21032	3.26	1.0E-48	5032032	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
1876	11772	21648	44.65	1.0E-48	AL163302.2	NT	Homo sapiens RNA binding motif protein 6 (RBM6) mRNA
3443	13360	23167	1.23	1.0E-48	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C102
5092	14952	24728	1.1	1.0E-48	M10976.1	NT	Homo sapiens chromosome 21 segment HS21C046
6303	16167	26325	2.21	1.0E-48	4755137	NT	Human endogenous retroviral DNA (4-1), complete retroviral segment
7337	17205	27404	5.72	1.0E-48	AB033071.1	NT	Homo sapiens huntingtin (Huntington disease) (HD) mRNA
7526	17377	27686	4.48	1.0E-48	BF304983.1	EST_HUMAN	Homo sapiens mRNA for KIAA1245 protein, partial cds
7934	17784	28023	5.06	1.0E-48	11429808	NT	601888096F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4122119 5'
7934	17784	28024	5.06	1.0E-48	11429808	NT	Homo sapiens B cell linker protein (SLP65), mRNA
8999	18802	29094	1.73	1.0E-48	AF119117.1	NT	Homo sapiens B cell linker protein (SLP65), mRNA
8999	18802	29095	1.73	1.0E-48	AF119117.1	NT	Homo sapiens dopamine transporter (SLC6A3) gene, complete cds
9145	19606		1.56	1.0E-48	W26785.1	EST_HUMAN	Homo sapiens dopamine transporter (SLC6A3) gene, complete cds
5692	15601	25702	2.95	8.0E-49	10048417	NT	15d6 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA
							Mus musculus T-box 20 (Tbx20), mRNA

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Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5692	15601	25703	2.95	8.0E-49	10048417	NT	Mus musculus T-box 20 (Tbx20), mRNA
6827	15706	26900	3.19	8.0E-49	U23850.1	NT	Human inositol 1,4,5 trisphosphate receptor type 1 mRNA, partial cds
134	10335	20157	1.47	7.0E-49	5729990	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, ATPase, 4 (PSMC4) mRNA
134	10335	20158	1.47	7.0E-49	5729990	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, ATPase, 4 (PSMC4) mRNA
388	10335	20157	1.74	7.0E-49	5729990	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, ATPase, 4 (PSMC4) mRNA
388	10335	20158	1.74	7.0E-49	5729990	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, ATPase, 4 (PSMC4) mRNA
389	10335	20157	1.99	7.0E-49	5729990	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, ATPase, 4 (PSMC4) mRNA
389	10335	20158	1.99	7.0E-49	5729990	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, ATPase, 4 (PSMC4) mRNA
1202	11112	20958	4.05	7.0E-49	AL163284.2	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, ATPase, 4 (PSMC4) mRNA
4550	14443	24227	0.95	7.0E-49	O60811	SWISSPROT	HYPOTHETICAL PROTEIN DJB45024.3
5351	15271	25100	1.93	7.0E-49	AI807191.1	EST_HUMAN	wf25h04.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2356663 3' similar to TR:O54923
5357	15277	25107	1.34	7.0E-49	AL120837.1	EST_HUMAN	O54923 RSEC15.1
							DKFp762C033_s1 762 (synonym: hmel2) Homo sapiens cDNA clone DKFp762C033 3'
							ba55g05.x1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2900504 3' similar to gb:X17206.405
							RIBOSOMAL PROTEIN S4 (HUMAN); gb:M20632 Mouse LLRep3 protein mRNA from a repetitive element, complete (MOUSE);
190	10162	19979	11.77	6.0E-49	AW731740.1	EST_HUMAN	UJ-H-B13-alc-a-05-0-UJ.s1 NCI_CGAP_Sub5 Homo sapiens cDNA clone IMAGE:3068048 3'
8600	18467	28738	2.92	6.0E-49	AW452218.1	EST_HUMAN	EST77525 Pancreas tumor III Homo sapiens cDNA 5' end
8920	18728	29022	2.69	6.0E-49	AA366556.1	EST_HUMAN	EST77525 Pancreas tumor III Homo sapiens cDNA 5' end
8920	18728	29023	2.69	6.0E-49	AA366556.1	EST_HUMAN	EST77525 Pancreas tumor III Homo sapiens cDNA 5' end
9507	19498		3.43	6.0E-49	AA707567.1	EST_HUMAN	zj29c08.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:451694 3'
695	10628	20452	3.37	5.0E-49	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
695	10628	20453	3.37	5.0E-49	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
							zp29c07.r1 Strategene neuroepithelium (#937231) Homo sapiens cDNA clone IMAGE:610860 5' similar to TR:G233226 G233226 RTVL-H PROTEIN; contains LTR7.3 LTR7 repetitive element;
1753	11653	21524	1.94	5.0E-49	AA172121.1	EST_HUMAN	Homo sapiens putative tumor suppressor ST13 (ST13) mRNA, complete cds
2721	12583	22477	5.18	5.0E-49	U17714.1	NT	
3235	13159	22957	5.13	5.0E-49	11436355	NT	Homo sapiens similar to ribosomal protein S27 (metallopanstimulin 1) (H. sapiens) (LOC63362), mRNA
514	10456	20266	37.46	4.0E-49	AW189533.1	EST_HUMAN	x08b01.x1 NCI_CGAP_Ut4 Homo sapiens cDNA clone IMAGE:2875593 3' similar to WP:B0350.2B
9376	19710		2.43	4.0E-49	AA210798.1	EST_HUMAN	CE06703;
							zj90f05.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:992977 5'
9459	19090		3.3	4.0E-49	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
548	10489	20298	0.93	3.0E-49	X68968.1	NT	H. sapiens mRNA for acetyl-CoA carboxylase

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Single Exon Probes Expressed In Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2611	12479		2.01	3.0E-49	AA016131.1	EST_HUMAN	ze31c05.r1 Soares retina N2b4HR Homo sapiens cDNA clone IMAGE:360584 5' similar to contains L1.13 L1 repetitive element;
4909	14788	24564	2.08	3.0E-49	U46999.1	NT	Human type IV collagen (COL4A6) gene, exon 40
6386	18248	28409	9.6	3.0E-49	H39479.1	EST_HUMAN	EST25e12 WATM1 Homo sapiens cDNA clone 25e12
8621	18487	28759	2.3	3.0E-49	AA337561.1	EST_HUMAN	EST42572 Endometrial tumor Homo sapiens cDNA 5' end
645	10582		2.66	2.0E-49	BE165980.1	EST_HUMAN	MR3-HT0487-150200-113-g01 HT0487 Homo sapiens cDNA
3185	13110	22914	1.4	2.0E-49	N26446.1	EST_HUMAN	yx23d06.r1 Soares melanocyte 2NbHM Homo sapiens cDNA clone IMAGE:262571 5'
3521	13437	23235	0.93	2.0E-49	AF026564.1	NT	Homo sapiens RNA binding protein II (RBMII) gene, complete cds
4693	14579	24373	1.12	2.0E-49	AI167357.1	EST_HUMAN	oz88d02.x1 Soares senescent fibroblasts NBHSF Homo sapiens cDNA clone IMAGE:1682403 3' similar to gb:M31470 RAS-LIKE PROTEIN TC10 (HUMAN); contains Alu repetitive element; contains element MER22 repetitive element;
4704	14590	24381	1.25	2.0E-49	BF511846.1	EST_HUMAN	UI-H-B14-aps-d-02-O-UJ.s1 NCI CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3088538 3'
6040	15943	26075	1.47	2.0E-49	AV717938.1	EST_HUMAN	AV717938 DCB Homo sapiens cDNA clone DCBALB01 5'
6717	16597		1.97	2.0E-49	M86033.1	EST_HUMAN	EST02558 Fetal brain, Striatogene (cat#936206) Homo sapiens cDNA clone HFBCY60
9467	19599		1.53	2.0E-49	AF033864.1	NT	Homo sapiens SNCA isoform (SNCA) gene, complete cds, alternatively spliced
881	10807		3.95	1.0E-49	BF035927.1	EST_HUMAN	601458531F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3862086 5'
1760	11659	21531	2.58	1.0E-49	BE255216.1	EST_HUMAN	601115769F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3356273 5'
5289	15210	25011	4.97	1.0E-49	BF131007.1	EST_HUMAN	601820053F1 NIH_MGC_58 Homo sapiens cDNA clone IMAGE:4052052 5'
6287	16151	26307	2.93	1.0E-49	BE398110.1	EST_HUMAN	601290330F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3620863 5'
6287	16151	26308	2.93	1.0E-49	BE398110.1	EST_HUMAN	601290330F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3620863 5'
6322	16185	26346	2.17	1.0E-49	N25884.1	EST_HUMAN	yw78g12.s1 Soares placenta 8to9weeks_2NbHP8to9W Homo sapiens cDNA clone IMAGE:258406 3' similar to gb:X65873 KINESIN HEAVY CHAIN (HUMAN);
6322	16185	26347	2.17	1.0E-49	N25884.1	EST_HUMAN	yw78g12.s1 Soares placenta 8to9weeks_2NbHP8to9W Homo sapiens cDNA clone IMAGE:258406 3' similar to gb:X65873 KINESIN HEAVY CHAIN (HUMAN);
6709	16589	26777	1.29	1.0E-49	11321580	NT	Homo sapiens succinate-CoA ligase, GDP-forming, alpha subunit (SUCLG1), mRNA
6709	16589	26778	1.29	1.0E-49	11321580	NT	Homo sapiens succinate-CoA ligase, GDP-forming, alpha subunit (SUCLG1), mRNA
7200	17077	27262	1.22	1.0E-49	BE409340.1	EST_HUMAN	601300992F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3635398 5'
7830	17680	27924	1.21	1.0E-49	AL043129.2	EST_HUMAN	DKFZp434D2423_r1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434D2423 5'
8630	18495	28769	3.88	1.0E-49	11427366	NT	Homo sapiens brefeldin A-inhibited guanine nucleotide-exchange protein 1 (BIG1), mRNA
9018	18813		1.73	1.0E-49	BE159343.1	EST_HUMAN	MR0-HT0407-010200-006-f02 HT0407 Homo sapiens cDNA
9367	19035		2	1.0E-49	11418322	NT	Homo sapiens cadherin EGF LAG seven-pass G-type receptor 1 (CELSR1), mRNA
4923	14802		1.06	9.0E-50	AF101475.1	NT	Homo sapiens glycine N-methyltransferase (GNMT) gene, complete cds
163	10136	19951	2.59	8.0E-50	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
702	10635	20460	1.89	8.0E-50	X95097.2	NT	Homo sapiens mRNA for VIP receptor 2

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
702	10635	20461	1.89	8.0E-50	X95097.2	NT	Homo sapiens mRNA for VIP receptor 2
1016	10934		1.21	8.0E-50	AF000573.1	NT	Homo sapiens homogenisate 1,2-dioxigenase gene, complete cds
1727	11628	21497	2.51	8.0E-50	4501890	NT	Homo sapiens actinin, alpha 1 (ACTN1) mRNA
2432	12309	22204	1.36	8.0E-50	7706394	NT	Homo sapiens p47 (LOC51674), mRNA
2432	12309	22205	1.36	8.0E-50	7706394	NT	Homo sapiens p47 (LOC51674), mRNA
2666	12531	22421	1.69	8.0E-50	4926658	NT	Homo sapiens capping protein (actin filament) muscle Z-line, beta (CAPZB), mRNA
8711	18528	28811	2.1	8.0E-50	AA633467.1	EST_HUMAN	np62d06.s1 NCL CGAP_Br2 Homo sapiens cDNA clone IMAGE:1130891 3' similar to gb:J05459
603	10539	20349	0.96	7.0E-50	BE089591.1	EST_HUMAN	GLUTATHIONE S-TRANSFERASE TESTIS(BRAIN) (HUMAN);
8139	18027	28273	9.52	7.0E-50	AI872137.1	EST_HUMAN	QV0-BT0703-280400-211-e08 BT0703 Homo sapiens cDNA
6781	16660		4.47	6.0E-50	BE044076.1	EST_HUMAN	wm55g11.x1 NCL CGAP_U12 Homo sapiens cDNA clone IMAGE:2439908 3'
8190	18076	28326	3.17	6.0E-50	AA312079.1	EST_HUMAN	h036h04.x1 NCL CGAP_U11 Homo sapiens cDNA clone IMAGE:3039511 3' similar to contains MER29.b3
8190	18076	28327	3.17	6.0E-50	AA312079.1	EST_HUMAN	MER29 repetitive element ;
1752	11652	21522	0.85	5.0E-50	BF332938.1	EST_HUMAN	EST182775 Jurkat T-cells VI Homo sapiens cDNA 5' end
1752	11652	21523	0.85	5.0E-50	BF332938.1	EST_HUMAN	EST182775 Jurkat T-cells VI Homo sapiens cDNA 5' end
7255	17132		5.64	5.0E-50	AA557683.1	EST_HUMAN	CM0-BT0792-300500-398-b05 BT0792 Homo sapiens cDNA
8991	18795	29086	1.85	5.0E-50	AA403053.1	EST_HUMAN	CM0-BT0792-300500-398-b05 BT0792 Homo sapiens cDNA
899	10824		1.29	4.0E-50	AA601143.1	EST_HUMAN	nl45h10.s1 NCL CGAP_P14 Homo sapiens cDNA clone IMAGE:1043683 similar to contains PTR5.13 PTR5
1896	11791		2.45	3.0E-50	M18048.1	NT	repetitive element ;
3259	13182	22981	1.14	3.0E-50	AA746142.1	EST_HUMAN	z62b01.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:726889 5' similar to TR:G1335769
3692	13606	23392	4.6	3.0E-50	AW755254.1	EST_HUMAN	G1335769 GAG-POL POLYPROTEIN. ;
6056	16039	26180	1.55	3.0E-50	11421514	NT	nd54e09.s1 NCL CGAP_SS1 Homo sapiens cDNA clone IMAGE:1104520 3' similar to gb:X53741_ma1
6505	16364	26540	4.01	3.0E-50	AF233436.2	NT	FIBULIN-1, ISOFORM A PRECURSOR (HUMAN);
6505	16364	26541	4.01	3.0E-50	AF233436.2	NT	Human endogenous retrovirus RTVL-H2
7649	17499	27721	1.17	3.0E-50	AB046818.1	NT	db03f06.s1 NCL CGAP_Kid3 Homo sapiens cDNA clone IMAGE:1322627 3'
8760	17909	28153	5.94	3.0E-50	AJ245621.1	NT	CMYA5 Human cardiac muscle expression library Homo sapiens cDNA clone 4151935 similar to CMYA5
							Cardiomyopathy associated gene 5
							Homo sapiens similar to sena domain, immunoglobulin domain (lg), short basic domain, secreted, (semaphorin) 3A (H. sapiens) (LOC63232), mRNA
							Homo sapiens FYVE domain-containing dual specificity protein phosphatase FYVE-DSP1a mRNA, complete cds
							Homo sapiens FYVE domain-containing dual specificity protein phosphatase FYVE-DSP1a mRNA, complete cds
							Homo sapiens mRNA for KIAA1598 protein, partial cds
							Homo sapiens CTL2 gene

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
761	10691		4.91	2.0E-50	AF050566.1	NT	Homo sapiens MHC class 1 region
1063	10979	20823	4.6	2.0E-50	4587752	NT	Homo sapiens midline 1 (Opitz/BBB syndrome) (MID1) mRNA
1425	11330	21197	18.02	2.0E-50	AF138303.1	NT	Homo sapiens decorin D mRNA, complete cds, alternatively spliced
6924	16802	26995	6.27	2.0E-50	X06956.1	NT	Human HALPHA44 gene for alpha-tubulin, exons 1-3
6924	16802	26996	6.27	2.0E-50	X06956.1	NT	Human HALPHA44 gene for alpha-tubulin, exons 1-3
7686	17536	27761	1.53	2.0E-50	9910293	NT	Mus musculus keratin complex 2, gene 6g (Krt2-6g), mRNA
7686	17536	27762	1.53	2.0E-50	9910293	NT	Mus musculus keratin complex 2, gene 6g (Krt2-6g), mRNA
235	10204	20018	1	1.0E-50	BE007080.1	EST_HUMAN	PM3-BN0137-290300-002-g11 BN0137 Homo sapiens cDNA
235	10204	20019	1	1.0E-50	BE007080.1	EST_HUMAN	PM3-BN0137-290300-002-g11 BN0137 Homo sapiens cDNA
454	10398	20215	2.1	1.0E-50	AL163209.2	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C009
2314	12195		8.98	1.0E-50	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region, segment 1/2
7375	17244	27450	1.22	9.0E-51	AA043738.1	EST_HUMAN	zkl5c09.r1 Soares_pregnant_uterus_NbhPU Homo sapiens cDNA clone IMAGE:486352 5'
4467	14361	24151	4.89	8.0E-51	AA610842.1	EST_HUMAN	mp98e09.s1 NC1_CGAP_Lu1 Homo sapiens cDNA clone IMAGE:1142440 3' similar to gb:X12671_mat HETEROGENEOUS NUCLEAR RIBONUCLEOPROTEIN A1 (HUMAN);
6510	16369	26546	2.34	8.0E-51	11439587	NT	Homo sapiens PDZ-73 protein (PDZ-73NY-CO-38), mRNA
7418	17257		1.28	8.0E-51	AU138590.1	EST_HUMAN	AU138590 PLACE1 Homo sapiens cDNA clone PLACE1008887 5'
3245	13168	22967	1.36	7.0E-51	AW889219.1	EST_HUMAN	QV4-NT0028-200400-180-d05 NT0028 Homo sapiens cDNA
3317	13238	23042	0.83	7.0E-51	AW274720.1	EST_HUMAN	xn34a03.x1 NC1_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2695564 3' similar to TR:Q9Z340
4076	13978	23757	1.26	7.0E-51	AL079628.1	EST_HUMAN	Q9Z340 ATYPICAL PKC SPECIFIC BINDING PROTEIN. ;
4076	13978	23758	1.26	7.0E-51	AL079628.1	EST_HUMAN	DKFZp434B2229_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434B2229 5'
4254	14153	23927	2.38	7.0E-51	AW295603.1	EST_HUMAN	DKFZp434B2229_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434B2229 5'
1936	11831	21714	5.3	6.0E-51		NT	UI-H-BW0-alp-b-05-0-UI.s1 NC1_CGAP_Sub6 Homo sapiens cDNA clone IMAGE:2729817 3'
3428	13345	23150	12.92	6.0E-51	7657266	NT	Homo sapiens KIAA0929 protein Mox2 interacting nuclear target (MINT) homolog (KIAA0929), mRNA
4212	14110	23887	0.78	6.0E-51	7657266	NT	Homo sapiens KIAA0929 protein Mox2 interacting nuclear target (MINT) homolog (KIAA0929), mRNA
4212	14110	23888	0.78	6.0E-51	9910553	NT	Homo sapiens solute carrier family 2 (facilitated glucose transporter), member 9 (SLC2A9), mRNA
5645	15558	25651	2.26	6.0E-51	X01788.1	NT	Homo sapiens solute carrier family 2 (facilitated glucose transporter), member 9 (SLC2A9), mRNA
5650	15562	25656	6.68	6.0E-51	AF070083.1	NT	Human haptoglobin related (Hpr) gene exon 3
5650	15562	25657	6.68	6.0E-51	AF070083.1	NT	Homo sapiens mitogen-activated protein kinase kinase 1 (MKK4) gene, exon 4
6158	15116	24859	2.16	6.0E-51	11429665	NT	Homo sapiens mitogen-activated protein kinase kinase 1 (MKK4) gene, exon 4
7583	17434	27649	2.26	6.0E-51	7661635	NT	Homo sapiens cerebral cell adhesion molecule (LOC51148), mRNA
8580	18448	28716	1.72	6.0E-51	11526289	NT	Homo sapiens B9 protein (B9), mRNA
						NT	Homo sapiens interleukin 17 receptor (IL17R), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
774	10704	20543	10.92	5.0E-51	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
786	10715	20557	1.47	5.0E-51	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
975	12682	20745	1.37	5.0E-51	AL133204.1	NT	Novel human gene mapping to chromosome X
1560	11494	21354	0.84	5.0E-51	5031980	NT	Homo sapiens 26S proteasome-associated pad1 homolog (POH1) mRNA
2548	12422	22311	11.48	5.0E-51	AJ007558.1	NT	Homo sapiens mRNA for nucleoporin 155
3863	13774	23566	1.08	5.0E-51	M30938.1	NT	Human Ku (p70/p80) subunit mRNA, complete cds
3863	13774	23567	1.08	5.0E-51	M30938.1	NT	Human Ku (p70/p80) subunit mRNA, complete cds
5004	14879	24943	2.34	5.0E-51	AB037832.1	NT	Homo sapiens mRNA for KIAA1411 protein, partial cds
8601	18468	28739	3.72	5.0E-51	5803136	NT	Homo sapiens RNA binding motif protein 3 (RBM3), mRNA
130	10104	19926	0.92	3.0E-51	AI587348.1	EST_HUMAN	tr81c09.x1 NCL_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2224720 3' similar to gb:M26326
1159	11072	20917	4.16	3.0E-51	AI587348.1	EST_HUMAN	tr81c09.x1 NCL_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2224720 3' similar to gb:M26326
4232	14130	23906	2.13	3.0E-51	AL159142.1	NT	KERATIN, TYPE I CYTOSKELETAL 18 (HUMAN); Novel human gene mapping to chromosome 22
6474	16333	28500	1.73	3.0E-51	R15914.1	EST_HUMAN	ya47c08.r1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:53233 5' similar to gb:M14123_cds4 RETROVIRUS-RELATED POL POLYPROTEIN (HUMAN); contains LTR5 repetitive element ;
7131	17008		5.87	3.0E-51	M29063.1	NT	Human hnRNP C2 protein mRNA
9875	19233		1.58	3.0E-51	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
362	10318	20139	1.81	2.0E-51	4507798	NT	Homo sapiens ubiquitin protein ligase E3A (human papilloma virus E6-associated protein, Angelman syndrome) (UBE3A) mRNA
673	10607	20424	1.08	2.0E-51	BE391063.1	EST_HUMAN	601285694F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3607463 5'
673	10607	20425	1.08	2.0E-51	BE391063.1	EST_HUMAN	601285694F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3607463 5'
1662	11564	21431	2.24	2.0E-51	AA233352.1	EST_HUMAN	zr30a05.r1 Striatagene NT2 neuronal precursor 937230 Homo sapiens cDNA clone IMAGE:664880 5' similar to TR:G233226 G233226 RTVL-H PROTEIN ; contains LTR7.13 LTR7 repetitive element ;
3672	13586	23373	2.21	2.0E-51	AI492415.1	EST_HUMAN	ti27g03.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2131732 3'
4392	14288	24071	1.02	2.0E-51	AW137826.1	EST_HUMAN	UI-H-B11-adj-d-02-0-U1.s1 NCL_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:3873563 5'
5662	15573	25670	2.96	2.0E-51	BE782015.1	EST_HUMAN	601470446F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3873563 5'
7047	16924	27114	1.61	2.0E-51	BE901994.1	EST_HUMAN	601676787F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3959613 5'
7047	16924	27115	1.61	2.0E-51	BE901994.1	EST_HUMAN	601676787F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3959613 5'
7478	17348	27652	1.68	2.0E-51	AI917078.1	EST_HUMAN	ts74807.x1 NCL_CGAP_G06 Homo sapiens cDNA clone IMAGE:2236980 3' similar to SW:TRKC_HUMAN Q16288 NT-3 GROWTH FACTOR RECEPTOR PRECURSOR ;
7539	17390	27600	5.25	2.0E-51	BE165980.1	EST_HUMAN	MR3-HT0487-150200-113-g01 HT0487 Homo sapiens cDNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7962	17812	28054	1.71	2.0E-51	AV682474.1	EST_HUMAN	AV682474 GKB Homo sapiens cDNA clone GKBAGF05 5'
8640	15259	25084	8.63	2.0E-51	A1732851.1	EST_HUMAN	0534f09.x5 NCI_CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1325609 3' similar to SW:NM1_MOUSE P35436 GLUTAMATE [NMDA] RECEPTOR SUBUNIT EPSILON 1 PRECURSOR ;
8640	15259	25085	8.63	2.0E-51	A1732851.1	EST_HUMAN	0534f09.x5 NCI_CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1325609 3' similar to SW:NM1_MOUSE P35438 GLUTAMATE [NMDA] RECEPTOR SUBUNIT EPSILON 1 PRECURSOR ;
9668	19227	25240	1.33	2.0E-51	11419159	NT	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (t(11q24)) homolog; translocated to, 4 (MLLT4), mRNA
109	10090	19905	4.4	1.0E-51	4503528	NT	Homo sapiens eukaryotic translation initiation factor 4A, isoform 1 (EIF4A1) mRNA
1478	11383		22.7	1.0E-51	AV742248.1	EST_HUMAN	AV742248 CB Homo sapiens cDNA clone OBFBCG12 5'
4309	14206	23989	0.96	1.0E-51	4759071	NT	Homo sapiens small inducible cytokine subfamily A (Cys-Cys), member 15 (SCYA15) mRNA
4309	14206	23990	0.96	1.0E-51	4759071	NT	Homo sapiens small inducible cytokine subfamily A (Cys-Cys), member 15 (SCYA15) mRNA
5310	15231	25036	3.12	1.0E-51	T18862.1	EST_HUMAN	b12056t Testis 1 Homo sapiens cDNA clone b12056
8989	19771		3.57	1.0E-51	AV760590.1	EST_HUMAN	AV760590 MDS Homo sapiens cDNA clone MDSCBB02 5'
9454	19086		3.28	9.0E-52	AA777621.1	EST_HUMAN	z95a07.s1 Soares fetal_liver spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:448500 3' similar to contains THR.t3 THR repetitive element ;
146	10120	19939	7.31	8.0E-52	AA720574.1	EST_HUMAN	rw21g02.s1 NCI_CGAP_GCB0 Homo sapiens cDNA clone IMAGE:1241138 3' similar to contains THR.t3 THR repetitive element ;
1481	11386	21249	1.33	8.0E-52	X84900.1	NT	H.sapiens mRNA for laminin-5, alpha3b chain
1633	11537	21397	2.05	8.0E-52	11968028	NT	Homo sapiens hypothetical protein FLJ13556 similar to N-myc downstream regulated 3 (FLJ13556), mRNA
1633	11537	21398	2.05	8.0E-52	11968028	NT	Homo sapiens hypothetical protein FLJ13556 similar to N-myc downstream regulated 3 (FLJ13556), mRNA
3913	11537	21397	6.44	8.0E-52	11968028	NT	Homo sapiens hypothetical protein FLJ13556 similar to N-myc downstream regulated 3 (FLJ13556), mRNA
3913	11537	21398	6.44	8.0E-52	11968028	NT	Homo sapiens hypothetical protein FLJ13556 similar to N-myc downstream regulated 3 (FLJ13556), mRNA
7211	17088	27278	1.48	7.0E-52	W56471.1	EST_HUMAN	Homo sapiens hypothetical protein FLJ13556 similar to N-myc downstream regulated 3 (FLJ13556), mRNA zc59a06.r1 Soares_parathyroid_tumor_NbHPA Homo sapiens cDNA clone IMAGE:325578 5' similar to contains Alu repetitive element ;
1170	11082		0.86	6.0E-52	BE072409.1	EST_HUMAN	QV3-BT0537-271299-049-d07 BT0537 Homo sapiens cDNA
1668	11570	21436	2.25	6.0E-52	AF109907.1	NT	Homo sapiens S164 gene, partial cds; PS1 and hypothetical protein genes, complete cds; and S171 gene, partial cds
8540	18412	28678	2.23	6.0E-52	BE048172.1	EST_HUMAN	tz46h04.y1 NCI_CGAP_Brm52 Homo sapiens cDNA clone IMAGE:2291671 5' similar to SW:PGBM_MOUSE_Q05793 BASEMENT MEMBRANE-SPECIFIC HEPARAN SULFATE PROTEOGLYCAN CORE PROTEIN PRECURSOR ;

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4340	14237	24021	2.07	5.0E-52	Z78898.1	NT	H.sapiens flow-sorted chromosome 6 HindIII fragment, SC6pA18H7
1639	11543	21402	0.93	4.0E-52	AF257318.1	NT	Homo sapiens SH3-containing protein SH3GLB1 mRNA, complete cds
1748	11648	21516	8.58	4.0E-52	4758843	NT	Homo sapiens nucleoporin 155kD (NUP155) mRNA
3850	13761	23554	0.82	4.0E-52	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
6686	16566	26760	1.24	4.0E-52	BE622032.1	EST_HUMAN	G01440687F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3915836 5'
6965	18843	27035	7.25	4.0E-52	11417035	NT	Homo sapiens hydroxysteroid (17-beta) dehydrogenase 4 (HSD17B4), mRNA
9291	18992		4.25	4.0E-52	11418177	NT	Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA
9778	19293		5.09	4.0E-52	AB002059.1	NT	Homo sapiens DNA for Human P2XM, complete cds
4002	13908		9.98	3.0E-52	11437042	NT	Homo sapiens hypothetical protein FLJ10675 (FLJ10675), mRNA
550	10491	20299	1.39	2.0E-52	M10976.1	NT	Human endogenous retroviral DNA (4-1), complete retroviral segment
550	10491	20300	1.39	2.0E-52	M10976.1	NT	Human endogenous retroviral DNA (4-1), complete retroviral segment
2450	12327	22226	1.75	2.0E-52	BE207575.1	EST_HUMAN	bb68607.y1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3030421 5' similar to gbX16489 M.musculus mRNA for Zpf-1 zinc finger protein (MOUSE);
2706	12569		20.53	2.0E-52	BF677892.1	EST_HUMAN	G02084710F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4248891 5'
4902	14782	24557	2.74	2.0E-52	AL137188.3	NT	Novel human gene mapping to chromosome 20, similar to membrane transporters
5497	15416	25479	2.74	2.0E-52	AW848041.1	EST_HUMAN	IL3-CT0214-231299-053-E12 CT0214 Homo sapiens cDNA
5841	15747	25960	1.49	2.0E-52	11141868	NT	Homo sapiens interleukin 21 receptor (IL21R), mRNA
7028	16905		8.39	2.0E-52	AF147880.1	NT	Macaca mulatta beta-tubulin mRNA, complete cds
7458	17267		1.98	2.0E-52	4758789	NT	Homo sapiens NADH dehydrogenase (ubiquinone) Fe-S protein 5 (15kD) (NADH-coenzyme Q reductase) (NDUFS5) mRNA
7825	17675	27918	4.53	2.0E-52	5730038	NT	Homo sapiens SET domain and mariner transposase fusion gene (SETMAR) mRNA
7825	17675	27919	4.53	2.0E-52	5730038	NT	Homo sapiens SET domain and mariner transposase fusion gene (SETMAR) mRNA
8536	18408	28671	5.33	2.0E-52	AI831462.1	EST_HUMAN	wj49c04.x1 NCI_CGAP_Lut19 Homo sapiens cDNA clone IMAGE:2406150 3' similar to contains THR.b2 THR repetitive element;
8536	18408	28672	5.33	2.0E-52	AI831462.1	EST_HUMAN	wj49c04.x1 NCI_CGAP_Lut19 Homo sapiens cDNA clone IMAGE:2406150 3' similar to contains THR.b2 THR repetitive element;
8547	18419	28689	3.09	2.0E-52	AV715377	EST_HUMAN	AV715377 DGB Homo sapiens cDNA clone DGBAIE03 5'
8659	18548		2.08	2.0E-52	W70260.1	EST_HUMAN	zd49g12.r1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:344038 5'
8891	18701		3.22	2.0E-52	11417690	NT	Homo sapiens LIM domain kinase 2 (LMK2), mRNA
9101	19755	24894	8.86	2.0E-52	AW236297.1	EST_HUMAN	xn72e07.x1 NCI_CGAP_OML1 Homo sapiens cDNA clone IMAGE:2700036 3' similar to contains Alu repetitive element; contains element LTR2 repetitive element;
9496	19112		4.28	2.0E-52	AI808985.1	EST_HUMAN	wf67d05.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2360649 3' similar to TR:Q16859 Q16859 CARBOXYLESTERASE;
522	10464	20276	1.37	1.0E-52	AA634445.1	EST_HUMAN	zu75h12.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:743879 3'

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Table 4
Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1349	11255	21111	8.25	1.0E-52	4504026	NT	Homo sapiens glutamate-aminonia ligase (glutamine synthase) (GLUL) mRNA
2489	12364		1.2	1.0E-52	4502238	NT	Homo sapiens arylsulfatase D (ARSD), transcript variant 1, mRNA
3021	12949	22741	1.41	1.0E-52	S61070.1	NT	pol=reverse transcriptase homolog (retroviral element) [human, endogenous retroviral element RTVL-Hp1, Genomic, 660 nt]
5270	15192	24957	3.59	1.0E-52	M29426.1	NT	Human P-glycoprotein (MDR1) gene, exon 4
5851	15757	25875	2.11	1.0E-52	U38964.1	NT	Human PMS2 related (hPMSR2) gene, complete cds
6394	16256	26417	3.19	1.0E-52	X07292.1	NT	Human aldolase C gene for fructose-1,6-bisphosphate aldolase
6932	16810		1.64	1.0E-52	AL163227.2	NT	Homo sapiens chromosome 21 segment HS21C027
8023	17873		1.61	1.0E-52	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
8147	18035	28283	1.84	1.0E-52	U48296.1	NT	Homo sapiens protein tyrosine phosphatase PTPCAAX1 (hPTPCAAX1) mRNA, complete cds
8210	18094		2.04	1.0E-52	11426321	NT	Homo sapiens proteasome (prosome, macropain) subunit, beta type, 2 (PSMB2), mRNA
3723	13635	23420	1.03	9.0E-53	4506064	NT	Homo sapiens protein kinase, cAMP-dependent, regulatory, type II, beta (PRKAR2B) mRNA
4293	14191	23975	1.01	9.0E-53	AF001446.1	NT	Homo sapiens core binding factor alpha1 subunit (CBFA1) gene, exon 3
4966	14841	24611	0.93	9.0E-53	7661743	NT	Homo sapiens predicted osteoblast protein (GS3786), mRNA
9338	19018		2.06	7.0E-53	BF238495.1	EST_HUMAN	601904771F1 NIH_MGC_54 Homo sapiens cDNA clone IMAGE:4132793 5'
9752	19682		2.98	7.0E-53	A1421782.1	EST_HUMAN	t44f07.x1 NCI CGAP Brn23 Homo sapiens cDNA clone IMAGE:2099077 3' similar to contains THR.L1
4009	13915	23690	2.2	5.0E-53	4758643	NT	THR repetitive element.
9389	19048		1.72	5.0E-53	AW813653.1	EST_HUMAN	Homo sapiens heterogeneous nuclear ribonucleoprotein C (C1/C2) (HNRPC) mRNA
43	10031	19834	1.92	4.0E-53	AL163285.2	NT	RC3-ST0197-151099-011-g10 ST0197 Homo sapiens cDNA
43	10031	19835	1.92	4.0E-53	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
4715	14601	24387	1.09	4.0E-53	7705414	NT	Homo sapiens chromosome 21 segment HS21C085
8545	18417	28685	3.33	4.0E-53	BF128701.1	EST_HUMAN	Homo sapiens hook1 protein (HOOK1), mRNA
8545	18417	28686	3.33	4.0E-53	BF128701.1	EST_HUMAN	601810969F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4053977 5'
2625	12493	22384	2.59	3.0E-53	AB026898.1	NT	601810969F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4053977 5'
3670	13584	23371	1.29	3.0E-53	AW050836.1	EST_HUMAN	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
4486	14380	24167	1.18	3.0E-53	AW803563.1	EST_HUMAN	wz22c07.x1 Soares Dieckgraefe_cdonc_NHCD Homo sapiens cDNA clone IMAGE:2558796 3'
4833	14715	24498	0.85	3.0E-53	BE069344.1	EST_HUMAN	IL2-UM0081-240300-055-D03 UM0081 Homo sapiens cDNA
6833	16712	26905	9.88	3.0E-53	S72043.1	NT	QV3-BT0381-270100-073-d06 BT0381 Homo sapiens cDNA
7238	17115		3.59	3.0E-53	5901963	NT	GLF=growth inhibitory factor [human, brain, Genomic, 2015 nt]
450	10394		4.25	2.0E-53	AA306556.1	EST_HUMAN	Homo sapiens FGFR1 oncogene partner (FOP), mRNA
2279	12163	22060	2.98	2.0E-53	U78027.1	NT	EST77525 Pancreas tumor III Homo sapiens cDNA 5' end
							Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein (L44L) and FTP3 (FTP3) genes, complete cds

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2490	12365		10.54	2.0E-53	4502316	NT	Homo sapiens ATPase, H+ transporting, lysosomal (vacuolar proton pump) 31kD; Vacuolar proton-ATPase, subunit E; V-ATPase, subunit E (ATP6E), mRNA
2694	12559	22446	6.93	2.0E-53	4757915	NT	Homo sapiens core-binding factor, runt domain, alpha subunit 2; translocated to, 1; cyclin D-related (CBFA2T1) mRNA
2694	12559	22447	6.93	2.0E-53	4757915	NT	Homo sapiens core-binding factor, runt domain, alpha subunit 2; translocated to, 1; cyclin D-related (CBFA2T1) mRNA
3207	13131	22933	1.18	2.0E-53	AF083822.1	NT	Homo sapiens dihydropyridine receptor alpha 2 subunit (CACNA2D1) gene, exon 6
3970	13877	23653	2.06	2.0E-53	M61873.1	NT	Human Krueppel-related DNA-binding protein (TF34) gene, partial cds
4390	14286	24068	1.07	2.0E-53	4506862	NT	Homo sapiens SKAP55 homologue (SKAP-HOM) mRNA
5091	14961	24735	1.12	2.0E-53	AL163281.2	NT	Homo sapiens chromosome 21 segment HS21C081
5091	14961	24736	1.12	2.0E-53	AL163281.2	NT	Homo sapiens chromosome 21 segment HS21C081
5331	15251	25056	3.11	2.0E-53	BF334740.1	EST_HUMAN	PM1-CT0396-170800-001-g03 CT0396 Homo sapiens cDNA
5331	15251	25057	3.11	2.0E-53	BF334740.1	EST_HUMAN	PM1-CT0396-170800-001-g03 CT0396 Homo sapiens cDNA
7413	17280		5.6	2.0E-53	AW245676.1	EST_HUMAN	2822665.5/time NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2822665 5'
1429	11334	21200	0.9	1.0E-53	AJ271736.1	NT	Homo sapiens Xq pseudautosomal region; segment 2/2
3364	13283	23083	1	1.0E-53	AB026998.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
6021	15925	26056	1.42	1.0E-53	BF364201.1	EST_HUMAN	GM4-NN1029-150800-543-e02 NN1029 Homo sapiens cDNA
7252	17129	27322	5.14	1.0E-53	X79536.1	NT	H. sapiens mRNA for hnRNP core protein A1
5152	15019	24787	0.8	9.0E-54	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
5152	15019	24788	0.8	9.0E-54	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
5244	19439	24939	4.71	9.0E-54	4506786	NT	Homo sapiens IQ motif containing GTPase activating protein 1 (IQGAP1) mRNA
200	10172	19988	3.09	8.0E-54	BE366785.1	EST_HUMAN	601272863F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3614031 5'
1794	11692	21568	1.33	8.0E-54	4504610	NT	Homo sapiens insulin-like growth factor 2 receptor (IGF2R) mRNA
4629	14517	24307	1.25	8.0E-54	4507843	NT	Homo sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13) mRNA
4629	14517	24308	1.25	8.0E-54	4507843	NT	Homo sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13) mRNA
5030	14517	24307	1.08	8.0E-54	4507843	NT	Homo sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13) mRNA
5030	14517	24308	1.08	8.0E-54	4507843	NT	Homo sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13) mRNA
5614	15529	25812	20.81	8.0E-54	6005700	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 8 (ABCA8), mRNA
379	10363	20186	1.26	7.0E-54	AA812537.1	EST_HUMAN	at79c12.s1 Soares testis NHT Homo sapiens cDNA clone 1377046 3' similar to contains MER30.i3 MER30 repetitive element ;
1799	11687	21563	1.54	7.0E-54	Y16645.1	NT	Homo sapiens mRNA for monocyle chemotactic protein-2
2158	12045	21945	4.61	7.0E-54	N27177.1	EST_HUMAN	yw68d12.s1 Soares placenta_80c9weeks_2NbhP80c9W Homo sapiens cDNA clone IMAGE:257399 3' similar to contains LTR7.b3 LTR7 repetitive element ;

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7831	17681	27925	2.23	7.0E-54	11417222	NT	Homo sapiens similar to nuclear factor related to kappa B binding protein (H. sapiens) (LOC63182), mRNA
8611	18478		6.24	7.0E-54	AI160189.1	EST_HUMAN	qb07g03.x1 Soares_fetal_heart_NbH19W Homo sapiens cDNA clone IMAGE:1705204 3' similar to contains OFR.t1 OFR repetitive element;
22	10009	19802	1.54	6.0E-54	AB003618.1	NT	Homo sapiens DNA for MICB, exon 4, 5 and partial cds
1833	11730	21805	0.87	6.0E-54	4505052	NT	Homo sapiens lymphocyte antigen 75 (LY75) mRNA, and translated products
1833	11730	21806	0.87	6.0E-54	4505052	NT	Homo sapiens lymphocyte antigen 75 (LY75) mRNA, and translated products
3246	13169	22688	0.84	6.0E-54	8922148	NT	Homo sapiens hypothetical protein DKFZp434M035 (DKFZp434M035), mRNA
3923	13832	23612	2.4	6.0E-54	4502872	NT	Homo sapiens chloride channel 8 (CLCN8) mRNA
4359	14255	24040	1.24	6.0E-54	AV754746.1	EST_HUMAN	AV754746 TP Homo sapiens cDNA clone TPGAAC10 5'
4774	14658		1.71	6.0E-54	Y09846.1	NT	H. sapiens shc pseudogene, p86 isoform
4930	14658		1.3	6.0E-54	Y09846.1	NT	H. sapiens shc pseudogene, p66 isoform
8750	17899	28143	1.77	6.0E-54	AW813567.1	EST_HUMAN	RC3-ST0197-151039-071-f08 ST0197 Homo sapiens cDNA
2104	11993	21893	2.25	5.0E-54	P51523	SWISSPROT	ZINC FINGER PROTEIN 84 (ZINC FINGER PROTEIN HPF2)
176	10147		106.83	4.0E-54	AF110103.1	NT	Tupaia belangeri beta-actin mRNA, partial cds
940	10865	20712	41.94	4.0E-54	AA306764.1	EST_HUMAN	EST177696 Jurkat T-cells VI Homo sapiens cDNA 5' end similar to glyceraldehyde-3-phosphate dehydrogenase
1764	11663	21636	3.24	4.0E-54	D38521.1	NT	Human mRNA for KIAA0077 gene, partial cds
1764	11663	21637	3.24	4.0E-54	D38521.1	NT	Human mRNA for KIAA0077 gene, partial cds
3168	13093		1.17	4.0E-54	AJ935086.1	EST_HUMAN	w28d11.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2329269 3' similar to TR:O02711
88	10072	19888	5.11	3.0E-54	AA313487.1	EST_HUMAN	O02711 PRO-POL-DUTPASE POLYPYRROLINE ;
2522	12396	22287	0.92	3.0E-54	AL110383.1	EST_HUMAN	EST185371 Colon carcinoma (HCC) cell line Homo sapiens cDNA 5' and
2583	12454		0.88	3.0E-54	AJ908757.1	EST_HUMAN	DKFZp434E0731_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434E0731 5'
5598	15512	25590	1.48	3.0E-54	4502434	NT	IL-BT180-190399-007 BT189 Homo sapiens cDNA
6373	16235	26394	1.68	3.0E-54	AA844061.1	EST_HUMAN	Homo sapiens BMX non-receptor tyrosine kinase (BMX) mRNA
6373	16235	26395	1.68	3.0E-54	AA844061.1	EST_HUMAN	ai92c08.s1 Soares_parathyroid_tumor_NbHPA Homo sapiens cDNA clone IMAGE:1388270 3'
8435	18309	28565	4.17	3.0E-54	BF345600.1	EST_HUMAN	ai92c08.s1 Soares_parathyroid_tumor_NbHPA Homo sapiens cDNA clone IMAGE:1388270 3'
8675	18563	28947	3.34	3.0E-54	AA393362.1	EST_HUMAN	602019408F1 NCI_CGAP_Brm67 Homo sapiens cDNA clone IMAGE:4155121 5'
9199	18932	26353	2.86	3.0E-54	AW954559.1	EST_HUMAN	z70f12.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:727727 5' similar to TR:G191315
9242	19714		7	3.0E-54	AW748965.1	EST_HUMAN	G191315 ANDROGEN-DEPENDENT EXPRESSED PROTEIN ;
626	10563	20374	6.29	2.0E-54	5031900	NT	EST366629 IMAGE resequences, MAGC Homo sapiens cDNA
1342	11248	21105	1.94	2.0E-54	4507164	NT	RC1-BT0313-131199-011-b09 BT0313 Homo sapiens cDNA
							Homo sapiens killer cell lectin-like receptor subfamily G, member 1 (KLRG1), mRNA
							Homo sapiens nuclear antigen Sp100 (SP100) mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1529	11434	21290	1.6	2.0E-54	AA655008.1	EST_HUMAN	nt78a09.s1 NCL_CGAP_P1r3 Homo sapiens cDNA clone IMAGE:1204600 similar to contains element L1 repetitive element;
2493	12367	22261	1.3	2.0E-54	AW163175.1	EST_HUMAN	eu92g03.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2783764 5' similar to SW:CUL1_HUMAN Q13616 CULLIN HOMOLOG 1;
2566	12428	22321	1.82	2.0E-54	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
2865	12793	22587	1.65	2.0E-54	AW057524.1	EST_HUMAN	wy60b12.x1 Soares NSF_F8_gw_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:2552927 3' similar to TR:Q62084 Q62084 PHOSPHOLIPASE C NEIGHBORING;
3501	13418		4.06	2.0E-54	AA532925.1	EST_HUMAN	nt45g09.s1 NCL_CGAP_P1r9 Homo sapiens cDNA clone IMAGE:995488 similar to gb:X53777 60S RIBOSOMAL PROTEIN L23 (HUMAN);
4110	14010		2.03	2.0E-54	4502642	NT	Homo sapiens chaperonin containing 1-complex subunit 6 (CC16) mRNA
4343	14240		1.13	2.0E-54	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
4780	14664	24450	1.45	2.0E-54	7706446	NT	Homo sapiens peptidylarginine deiminase type III (LOC51702), mRNA
5156	15023	24790	0.84	2.0E-54	AF03823.1	NT	Homo sapiens dihydropyridine receptor alpha 2 subunit (CACNA2D1) gene, exon 7
5363	15283	25116	3.75	2.0E-54	4759009	NT	Homo sapiens small inducible cytokine subfamily A (Cys-Cys), member 14 (SCYA14) mRNA
5440	15380	25417	1.34	2.0E-54	BE047864.1	EST_HUMAN	tz43c11.y1 NCL_CGAP_Bm52 Homo sapiens cDNA clone IMAGE:2291348 5'
5521	15439	25503	3.59	2.0E-54	11426657	NT	Homo sapiens KIAA0100 gene product (KIAA0100), mRNA
5573	15488	25564	18.19	2.0E-54	AB046811.1	NT	Homo sapiens mRNA for KIAA1591 protein, partial cds
5573	15488	25565	18.19	2.0E-54	AB046811.1	NT	Homo sapiens mRNA for KIAA1591 protein, partial cds
6227	16093	26243	8.14	2.0E-54	11426544	NT	Homo sapiens neurofibromin 1 (neurofibromatosis, von Recklinghausen disease, Watson disease) (NF1), mRNA
7562	17403	27617	3.62	2.0E-54	AB001025.1	NT	Homo sapiens mRNA for brain natriuretic receptor, complete cds
7749	17599	27821	1.26	2.0E-54	11429127	NT	Homo sapiens Janus Kinase 2 (a protein tyrosine kinase) (JAK2), mRNA
8963	18770		2.57	2.0E-54	7657454	NT	Homo sapiens pascadillo (zebrafish) homolog 1, containing BRCT domain (PES1), mRNA
9693	19244	25216	1.46	2.0E-54	8567387	NT	Homo sapiens period (Drosophila) homolog 3 (PER3), mRNA
4363	14259		1.07	1.0E-54	BF315418.1	EST_HUMAN	G01899230F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4128535 5'
9852	19345		2.26	1.0E-54	AU077341.1	EST_HUMAN	AU077341 Sugano cDNA library Homo sapiens cDNA clone Zm6C880 similar to 5'-end region of Human gamma-glutamyl transpeptidase mRNA, 5 end
1294	11201		14.56	8.0E-55	Y07829.2	NT	Homo sapiens RFB30 gene for RING finger: protein
1297	11204		2.32	8.0E-55	Y07829.2	NT	Homo sapiens RFB30 gene for RING finger: protein
8530	18402		2.76	8.0E-55	AW409714.1	EST_HUMAN	fn02a02.x1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2960907 5'
1065	10981	20826	1.19	7.0E-55	R09346.1	EST_HUMAN	vt2ge04.r1 Soares fetal liver spleen TNF3S Homo sapiens cDNA clone IMAGE:127998 5' similar to SP:C561_BOVIN P10897 CYTOCHROME;
7297	17173	27373	1.26	7.0E-55	AA89581.1	EST_HUMAN	ak28a11.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1407260 3'
7315	17191	27393	1.59	7.0E-55	AU139909.1	EST_HUMAN	AU139909 PLACE1 Homo sapiens cDNA clone PLACE1011576 5'

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Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8541	18413	28679	12.75	7.0E-55	AI561056.1	EST_HUMAN	tq29f09.x1 NCI_CGAP_U11 Homo sapiens cDNA clone IMAGE:2210249 3'
8541	18413	28680	12.75	7.0E-55	AI561056.1	EST_HUMAN	tq29f09.x1 NCI_CGAP_U11 Homo sapiens cDNA clone IMAGE:2210249 3'
9823	18648		4.3	7.0E-55	H23396.1	EST_HUMAN	ym57g07.r1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:52444 5'
8803	18617	28908	1.98	6.0E-55	AB040934.1	NT	Homo sapiens mRNA for KIAA1501 protein, partial cds
1732	11633	21500	1.12	5.0E-55	AA704971.1	EST_HUMAN	zj95b09.s1 Soares fetal liver spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:462617 3'
1732	11633	21501	1.12	5.0E-55	AA704971.1	EST_HUMAN	zj95b09.s1 Soares fetal liver spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:462617 3'
5941	15846	25969	1.82	5.0E-55	4502240	NT	Homo sapiens arylsulfatase E (chondrodysplasia punctata 1) (ARSE), mRNA
5941	15846	25970	1.82	5.0E-55	4502240	NT	Homo sapiens arylsulfatase E (chondrodysplasia punctata 1) (ARSE), mRNA
7229	17106	27296	2.06	5.0E-55	4506302	NT	Homo sapiens protein tyrosine phosphatase, receptor type, alpha polypeptide (PTPRA) mRNA
7770	17620	27851	1.86	5.0E-55	AB014511.1	NT	Homo sapiens mRNA for KIAA0611 protein, partial cds
7770	17620	27852	1.86	5.0E-55	AB014511.1	NT	Homo sapiens mRNA for KIAA0611 protein, partial cds
7869	17719	27965	1.19	5.0E-55	5453765	NT	Homo sapiens ncl (chicken)-like 2 (NELL2), mRNA
9283	18985		2.13	5.0E-55	11417972	NT	Homo sapiens pascadillo (zebrafish) homolog 1, containing BRCT domain (PES1), mRNA
49	12658	19843	1.36	4.0E-55	AW957994.1	EST_HUMAN	EST370064 MAGE resequences, MAGE Homo sapiens cDNA
656	10591	20409	33.95	4.0E-55	4826973	NT	Homo sapiens RNA binding motif protein, Y chromosome, family 1, member A1 (RBMY1A1) mRNA
1422	11328	21193	1.80	4.0E-55	7661713	NT	Homo sapiens predicted osteoblast protein (GS3786), mRNA
1422	11328	21194	1.89	4.0E-55	7661713	NT	Homo sapiens predicted osteoblast protein (GS3786), mRNA
1498	11402		1.26	4.0E-55	BF061411.1	EST_HUMAN	7j52b10.x1 Soares NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3390043 3' similar to contains L1 L3 L1 repetitive element;
1979	11872	21763	1.53	4.0E-55	4506180	NT	Homo sapiens proteasome (prosome, macropain) subunit, alpha type, 2 (PSMA2) mRNA
1979	11872	21764	1.53	4.0E-55	4506180	NT	Homo sapiens proteasome (prosome, macropain) subunit, alpha type, 2 (PSMA2) mRNA
2039	11930	21824	7.73	4.0E-55	4503314	NT	Homo sapiens diacylglycerol kinase, gamma (90kD) (DGKG) mRNA
2039	11930	21825	7.73	4.0E-55	4503314	NT	Homo sapiens diacylglycerol kinase, gamma (90kD) (DGKG) mRNA
2262	12146	22046	1.25	4.0E-55	4507794	NT	Homo sapiens ubiquitin-conjugating enzyme E2 variant 1 (UBE2V1) mRNA
2545	12419		1.04	4.0E-55	AJ271735.1	NT	Homo sapiens Xq pseudoautosomal region, segment 1/2
3242	13165	22964	1.38	4.0E-55	AL163300.2	NT	Homo sapiens chromosome 21 segment HS21C100
6857	16736		6.44	4.0E-55	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
8559	18429		4.46	4.0E-55	W28189.1	EST_HUMAN	43c5 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA
9200	18933		2.38	4.0E-55	BF303941.1	EST_HUMAN	60188657F2 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4120338 5'
9138	18894		2.76	3.0E-55	BE178519.1	EST_HUMAN	PM1-HT0603-090300-001-g08 HT0603 Homo sapiens cDNA
9866	19356		1.65	3.0E-55	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
373	10327	20150	2.3	2.0E-55	X57147.1	NT	Human endogenous retrovirus pHE.1 (ERV9)
539	10480		0.89	2.0E-55	M10976.1	NT	Human endogenous retroviral DNA (4-1), complete retroviral segment
633	10570	20383	3.08	2.0E-55	4507296	NT	Homo sapiens syntaxin-binding protein 1 (STXBP1) mRNA, and translated products

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Table 4
Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2928	12855	22656	0.79	2.0E-55	4507798	NT	Homo sapiens ubiquitin protein ligase E3A (human papilloma virus E6-associated protein, Angelman syndrome) (UBE3A) mRNA
4665	14551	24342	2.97	2.0E-55	BE719986.1	EST_HUMAN	CM1-HT0876-150800-357-g03 HT0876 Homo sapiens cDNA
7284	17160		4.3	2.0E-55	A1002836.1	EST_HUMAN	am98h05.s1 Stratiogene schizo brain S11 Homo sapiens cDNA clone IMAGE:1684185 3' similar to contains THR.b2 THR repetitive element ;
8319	18196	28446	2.2	2.0E-55	AU119344.1	EST_HUMAN	AU119344 HEMBA1 Homo sapiens cDNA clone HEMBA1005583 5'
91	10075	19891	1.6	1.0E-55	4505060	NT	Homo sapiens mannos-6-phosphate receptor (cation dependent) (M6PR) mRNA
182	10154	19969	11.9	1.0E-55	U09823.1	NT	Oryctolagus cuniculus New Zealand white elongation factor 1 alpha (Rabellaz) mRNA, complete cds
1132	11046	20888	3.55	1.0E-55	AB020710.1	NT	Homo sapiens mRNA for KIA00903 protein, partial cds
1907	11802	21690	0.86	1.0E-55	BE277861.1	EST_HUMAN	601120116F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2967027 5'
1907	11802	21681	0.86	1.0E-55	BE277861.1	EST_HUMAN	601120116F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2967027 5'
2277	12161		2.3	1.0E-55	5803174	NT	Homo sapiens SMA3 (SMA3), mRNA
2290	12651	22071	1.03	1.0E-55	AF000990.1	NT	Homo sapiens testis-specific Testis Transcript Y 1 (TTY1) mRNA, partial cds
2470	12346	22238	33.19	1.0E-55	X13111.1	NT	Human mRNA for HLA-A11E, a MHC class I molecule (major histocompatibility complex)
2507	12381	22271	4.71	1.0E-55	AB007866.2	NT	Homo sapiens mRNA for KIA04046 protein, partial cds
2507	12381	22272	4.71	1.0E-55	AB007866.2	NT	Homo sapiens mRNA for KIA04046 protein, partial cds
2568	12439	22331	1.35	1.0E-55	L54057.1	NT	Homo sapiens GLP mRNA, partial cds
3363	13282	23082	1.15	1.0E-55	W28189.1	EST_HUMAN	43c5 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA
3907	13817	23597	3.47	1.0E-55	AL163267.2	NT	Homo sapiens chromosome 21 segment HS21C067
4197	14097	23878	1.04	1.0E-55	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
4721	14607	24392	0.98	1.0E-55	AB037163.1	NT	Homo sapiens DSCR5b mRNA, complete cds
4721	14607	24393	0.98	1.0E-55	AB037163.1	NT	Homo sapiens DSCR5b mRNA, complete cds
5081	14951	24727	1.19	1.0E-55	8923125	NT	Homo sapiens hypothetical protein FLJ20126 (FLJ20126), mRNA
5794	15700	25809	5.75	1.0E-55	11433046	NT	Homo sapiens hect domain and RLD 2 (HERC2), mRNA
5794	15700	25810	5.75	1.0E-55	11433046	NT	Homo sapiens hect domain and RLD 2 (HERC2), mRNA
8284	18163	28405	4.74	1.0E-55	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
8284	18163	28406	4.74	1.0E-55	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
8745	17894	28138	2.58	1.0E-55	U50950.1	NT	Human infant brain unknown product mRNA, complete cds
8859	18671	28959	2.04	1.0E-55	10567821	NT	Homo sapiens DNA-binding protein (LOC56242), mRNA
6358	16221	26393	1.81	9.0E-56	BE379074.1	EST_HUMAN	601237702F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3609552 5'
2703	12567	22457	5.18	7.0E-56	H19934.1	EST_HUMAN	Yn62g03.r1 Soares adult brain N2b5HB55Y Homo sapiens cDNA clone IMAGE:173044 5' similar to contains THR repetitive element ;
6504	16363	26538	1.84	7.0E-56	AW361213.1	EST_HUMAN	RC1-CT0252-231099-013-b07 CT0252 Homo sapiens cDNA

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6504	16363	26539	1.84	7.0E-56	AW361213.1	EST_HUMAN	RC1-CT0252-231059-013-b07 CT0252 Homo sapiens cDNA
1666	11568	21434	2.26	5.0E-56	AW997112.1	EST_HUMAN	RC3-BN0053-170200-011-J01 BN0053 Homo sapiens cDNA
7940	17790		1.31	5.0E-56	W28189.1	EST_HUMAN	43c5 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA
9375	19701	24902	2.68	5.0E-56	H55099.1	EST_HUMAN	CHR220038 Chromosome 22 exon Homo sapiens cDNA clone C22_55 5'
25	10012	19805	6.15	4.0E-56	AF141349.1	NT	Homo sapiens beta-tubulin mRNA, complete cds
25	10012	19806	6.15	4.0E-56	AF141349.1	NT	Homo sapiens beta-tubulin mRNA, complete cds
2676	12541	22431	4.11	4.0E-56	4507728	NT	Homo sapiens tubulin, beta polypeptide (TUBB) mRNA
2676	12541	22432	4.11	4.0E-56	4507728	NT	Homo sapiens tubulin, beta polypeptide (TUBB) mRNA
2781	10457	20268	3.05	4.0E-56	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
5788	15694	25802	6.29	4.0E-56	AF217508.1	NT	Homo sapiens uncharacterized bone marrow protein BM031 mRNA, complete cds
5788	15694	25803	6.29	4.0E-56	AF217508.1	NT	Homo sapiens uncharacterized bone marrow protein BM031 mRNA, complete cds
7999	17849	28090	1.23	4.0E-56	AF043349.1	NT	Homo sapiens lymphocyte-specific protein 1 (LSP1) gene, LSP1-7 allele, partial cds
8295	18174	28417	8.75	4.0E-56	AI498066.1	EST_HUMAN	tm55g12.x1 NCL CGAP_Brn25 Homo sapiens cDNA clone IMAGE:2163046 3'
8295	18174	28418	8.75	4.0E-56	AI498066.1	EST_HUMAN	tm55g12.x1 NCL CGAP_Brn25 Homo sapiens cDNA clone IMAGE:2163046 3'
1318	11225	21081	9.85	3.0E-56	8924029	NT	Homo sapiens hypothetical protein PRO1304 (PRO1304), mRNA
2103	11692	21892	2.7	3.0E-56	6912637	NT	Homo sapiens oncogene TC21 (TC21), mRNA
3086	13013	22804	1.58	3.0E-56	AA325826.1	EST_HUMAN	EST28889 Cerebellum II Homo sapiens cDNA 5' end
3086	13013	22805	1.58	3.0E-56	AA325826.1	EST_HUMAN	EST28889 Cerebellum II Homo sapiens cDNA 5' end
3761	13674		1.39	3.0E-56	AF055066.1	NT	Homo sapiens MHC class 1 region
4327	14224	24006	4.05	3.0E-56	AL163268.2	NT	Homo sapiens chromosome 21 segment HS21C068
4470	14364	24154	2.14	3.0E-56	5902085	NT	Homo sapiens superkiller viralicidic activity 2 (S. cerevisiae homolog)-like (SKIV2L), mRNA
5486	15405	25467	1.57	3.0E-56	4759163	NT	Homo sapiens sparc/osteonectin, cwcw and kazal-like domains proteoglycan (testican) (SPOCK) mRNA
5486	15405	25468	1.57	3.0E-56	4759163	NT	Homo sapiens sparc/osteonectin, cwcw and kazal-like domains proteoglycan (testican) (SPOCK) mRNA
6109	16003	26141	6.34	3.0E-56	11421124	NT	Homo sapiens lysosomal-associated membrane protein 2 (LAMP2), mRNA
7117	16994	27185	5.74	3.0E-56	11418704	NT	Homo sapiens bone morphogenetic protein 5 (BMP5), mRNA
7987	17837	28078	1.52	3.0E-56	11434956	NT	Homo sapiens KIAA0317 gene product (KIAA0317), mRNA
8124	18012	28259	10.72	3.0E-56	AB042556.1	NT	Homo sapiens mRNA, similar to rat myomegalin, complete cds
8632	18497	28771	3.89	3.0E-56	5902013	NT	Homo sapiens nuclear pore complex interacting protein (NPIP), mRNA
8632	18497	28772	3.89	3.0E-56	5902013	NT	Homo sapiens nuclear pore complex interacting protein (NPIP), mRNA
9240	18955	26315	2.3	3.0E-56	11434876	NT	Homo sapiens caveolin 3 (CAV3), mRNA
9240	18955	26316	2.3	3.0E-56	11434876	NT	Homo sapiens caveolin 3 (CAV3), mRNA

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
513	10455		2.94	2.0E-56	AA199818.1	EST_HUMAN	zq52a08.s1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone IMAGE:645206 3'
716	12675	20476	1.19	2.0E-56	BE064986.1	EST_HUMAN	RC4-BT0310-110300-015-f10 BT0310 Homo sapiens cDNA
716	12675	20477	1.19	2.0E-56	BE064986.1	EST_HUMAN	RC4-BT0310-110300-015-f10 BT0310 Homo sapiens cDNA
2334	12215	22113	1.02	2.0E-56	M26061.1	NT	Human cGMP phosphodiesterase alpha subunit (CGPR-A) mRNA, complete cds
2334	12215	22114	1.02	2.0E-56	M26061.1	NT	Human cGMP phosphodiesterase alpha subunit (CGPR-A) mRNA, complete cds
2969	12886	22884	0.93	2.0E-56	AB037835.1	NT	Homo sapiens mRNA for KIAA1414 protein, partial cds
3489	13405	23210	1.08	2.0E-56	AV703184.1	EST_HUMAN	AV703184 ADB Homo sapiens cDNA clone ADBCFG10 5'
964	10887		1.44	1.0E-56	AF190930.1	NT	Macaca fascicularis protein tyrosine phosphatase (PRL-1) mRNA, complete cds
3622	13536	23321	1.79	1.0E-56	AW589833.1	EST_HUMAN	hg23c11.x1 NCL_CGAP_GG6 Homo sapiens cDNA clone IMAGE:2946452 3'
3622	13536	23322	1.79	1.0E-56	AW589833.1	EST_HUMAN	hg23c11.x1 NCL_CGAP_GG6 Homo sapiens cDNA clone IMAGE:2946452 3'
4963	14838	24806	1.52	1.0E-56	AI905162.1	EST_HUMAN	QV-BT077-130199-079 BT077 Homo sapiens cDNA
7780	17630	27963	1.86	1.0E-56	AW845987.1	EST_HUMAN	RC2-CT0163-220999-001-E02 CT0163 Homo sapiens cDNA
609	10545		1.97	9.0E-57	AW880885.1	EST_HUMAN	QV0-OT0033-070300-152-h03 OT0033 Homo sapiens cDNA
4109	14009	23786	1.17	9.0E-57	4758279	NT	Homo sapiens EphA4 (EPHA4) mRNA
4109	14009	23787	1.17	9.0E-57	4758279	NT	Homo sapiens EphA4 (EPHA4) mRNA
13	9999	19790	1.55	8.0E-57	8923349	NT	Homo sapiens hypothetical protein FLJ20371 (FLJ20371), mRNA
294	10268	20079	2.91	8.0E-57	AW818405.1	EST_HUMAN	QV4-ST0234-181199-037-405 ST0234 Homo sapiens cDNA
866	10792	20642					x05d10.x1 NCL_CGAP_Bm53 Homo sapiens cDNA clone IMAGE:2759251 3' similar to gb.U05875
1774	11673	21551	5.79	8.0E-57	AW264599.1	EST_HUMAN	INTERFERON-GAMMA RECEPTOR BETA CHAIN PRECURSOR (HUMAN);
3335	13255	23060	1.63	8.0E-57	AA496109.1	EST_HUMAN	z51b12.1 Soares testis NHT Homo sapiens cDNA clone IMAGE:757151 5'
3335	13255	23061	1.02	8.0E-57	4758279	NT	Homo sapiens EphA4 (EPHA4) mRNA
5107	14975	24750	0.96	8.0E-57	AA971001.1	EST_HUMAN	Homo sapiens EphA4 (EPHA4) mRNA
5207	19624	25004	6.35	8.0E-57	11418185	NT	op67h02.s1 Soares NFL_T_G9C_S1 Homo sapiens cDNA clone IMAGE:1581939 3'
5888	15794	25915	11.76	8.0E-57	AB023177.1	NT	Homo sapiens aconitase 2, mitochondrial (ACO2), mRNA
5888	15794	25916	11.76	8.0E-57	AB023177.1	NT	Homo sapiens mRNA for KIAA0960 protein, partial cds
6557	16415	26594	67.76	8.0E-57	AB020644.1	NT	Homo sapiens mRNA for KIAA0960 protein, partial cds
6557	16415	26595	67.76	8.0E-57	AB020644.1	NT	Homo sapiens mRNA for KIAA0837 protein, partial cds
8771	9999	19790	3.32	8.0E-57	8923349	NT	Homo sapiens mRNA for KIAA0837 protein, partial cds
9468	19097		1.27	8.0E-57	7019528	NT	Homo sapiens hypothetical protein FLJ20371 (FLJ20371), mRNA
9607	19188	25251	2.02	8.0E-57	11545732	NT	Homo sapiens monocarboxylate transporter 3 (SLC16A8), mRNA
9622	19188	25251	1.39	8.0E-57	11545732	NT	Homo sapiens SH3-domain binding protein 1 (SH3BP1), mRNA
2592	12462	22553	2.02	7.0E-57	7657592	NT	Homo sapiens SH3-domain binding protein 1 (SH3BP1), mRNA
2592	12462	22354	2.02	7.0E-57	7657592	NT	Homo sapiens smg GDS-ASSOCIATED PROTEIN (SMAP), mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3212	13136	22937	0.92	7.0E-57	7242158	NT	Homo sapiens NME7 (NME7), mRNA
3212	13136	22938	0.92	7.0E-57	7242158	NT	Homo sapiens NME7 (NME7), mRNA
3233	13157	22956	6.49	7.0E-57	6005979	NT	Homo sapiens Kruppel-like factor 8 (KLF8), mRNA
3801	13713	23500	2.17	7.0E-57	AF012872.1	NT	Homo sapiens phosphatidylinositol 4-kinase 230 (pi4K230) mRNA, complete cds
3801	13713	23501	2.17	7.0E-57	AF012872.1	NT	Homo sapiens phosphatidylinositol 4-kinase 230 (pi4K230) mRNA, complete cds
9934	19656		2.99	5.0E-57	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region, segment 1/2
3694	13608	23393	1.23	4.0E-57	AB026898.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
4935	14813	24581	0.96	4.0E-57	BE793649.1	EST_HUMAN	601471226F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3874135 5'
787	10716	20558	0.79	3.0E-57	4507798	NT	Homo sapiens ubiquitin protein ligase E3A (human papilloma virus E6-associated protein, Angelman syndrome) (UBE3A) mRNA
1309	11215		11.34	3.0E-57	AA230279.1	EST_HUMAN	nc13f07.s1 NCI_CGAP_P71 Homo sapiens cDNA clone IMAGE:1008037 similar to SW:RS10_HUMAN
2342	12222	22119	2.83	3.0E-57	AA348335.1	EST_HUMAN	P46783 40S RIBOSOMAL PROTEIN S10 ; EST54770 Hippocampus II Homo sapiens cDNA 5' end
2670	12535	22425	1.62	3.0E-57	BE676622.1	EST_HUMAN	733b10.x1 NCI_CGAP_CLL1 Homo sapiens cDNA clone IMAGE:3296443 3' similar to WP:Y47H9C.2 CE20263 ;
2670	12535	22426	1.62	3.0E-57	BE676622.1	EST_HUMAN	733b10.x1 NCI_CGAP_CLL1 Homo sapiens cDNA clone IMAGE:3296443 3' similar to WP:Y47H9C.2 CE20263 ;
3514	13430	23230	1.15	3.0E-57	AF232708.1	NT	Homo sapiens cell-line tsA201a chloride ion current inducer protein I(Cln) gene, complete cds
3639	13553		115.94	3.0E-57	AW853964.1	EST_HUMAN	RC3-CT0254-110300-027-d10 CT0254 Homo sapiens cDNA
5723	16630	25733	3.34	3.0E-57	BE796637.1	EST_HUMAN	601589896F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3944302 5'
6736	16615	26805	3.95	3.0E-57	W28130.1	EST_HUMAN	42f6 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA
6751	16630	26817	1.96	3.0E-57	11545798	NT	Homo sapiens hypothetical protein FLJ11656 (FLJ11656), mRNA
6751	16630	26818	1.95	3.0E-57	11545798	NT	Homo sapiens hypothetical protein FLJ11656 (FLJ11656), mRNA
7142	17019	27212	4.65	3.0E-57	AU117659.1	EST_HUMAN	AU117659 HEMBA1 Homo sapiens cDNA clone HEMBA1001910 5'
8279	18159	28400	20.31	3.0E-57	AW248374.1	EST_HUMAN	2820473.5prime NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2820473 5'
9247	19721	24907	5.2	3.0E-57	W23871.1	EST_HUMAN	zb45d11.r1 Soares_fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:306549 5'
9608	19628		2.15	3.0E-57	AW178575.1	EST_HUMAN	RC0-HT0112-080399-001-C06 HT0112 Homo sapiens cDNA
2699	12563	22453	1.19	2.0E-57	AA845419.1	EST_HUMAN	ak02b02.s1 Soares_parathyroid_tumor_NbHPA Homo sapiens cDNA clone IMAGE:1404747 3' similar to contains Alu repetitive element; contains element MER22 repetitive element ;
3392	13309		2.91	2.0E-57	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
3504	13421	23223	0.84	2.0E-57	R07702.1	EST_HUMAN	ye8h01.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:126809 5'
3504	13421	23224	0.84	2.0E-57	R07702.1	EST_HUMAN	ye8h01.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:126809 5'
4409	14303	24086	6.88	2.0E-57	AL163283.2	NT	Homo sapiens chromosome 21 segment HS21C083

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5478	15398		1.43	2.0E-57	AA016131.1	EST_HUMAN	ze31c05.r1 Soares retina N2b4HR Homo sapiens cDNA clone IMAGE:360584 5' similar to contains L1.13 L1 repetitive element;
5676	15585		28.14	2.0E-57	BF115266.1	EST_HUMAN	7n80f04.x1 NCL_CGAP_Ov18 Homo sapiens cDNA clone IMAGE:3570966 3' similar to contains TAR1.11
7017	16894	27084	1.29	2.0E-57	AF045452.1	NT	MER22 repetitive element;
7665	17515	27742	1.71	2.0E-57	AF057722.1	NT	Homo sapiens cell-line KG1 transcriptional regulatory protein p54 mRNA, complete cds
8592	18460	28729	2.22	2.0E-57	11424084	NT	Homo sapiens 17-beta-hydroxysteroid dehydrogenase IV (HSD17B4) gene, exons 3 and 4
8592	18460	28730	2.22	2.0E-57	11424084	NT	Homo sapiens hypothetical protein FLJ20041 (FLJ20041), mRNA
2184	12071	21973	1.12	1.0E-57	AW503208.1	EST_HUMAN	Homo sapiens hypothetical protein FLJ20041 (FLJ20041), mRNA
7045	16922		2.08	1.0E-57	BE043031.1	EST_HUMAN	UI-HF-BNO-akt-g-07-0-UI.r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3078348 5'
9401	19055		3.47	1.0E-57	AW470791.1	EST_HUMAN	hc32a08.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3039062 3' similar to TR:O00246 O00246
9663	19223	25238	1.43	9.0E-58	BE395081.1	EST_HUMAN	HYPOTHETICAL 9.3 KD PROTEIN;
574	10512		1.41	8.0E-58	BE868715.1	EST_HUMAN	ha33d06.x1 NCL_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2875499 3' similar to contains THR.b3
638	10575	20389	2.62	8.0E-58	AI798376.1	EST_HUMAN	THR repetitive element;
638	10575	20390	2.62	8.0E-58	AI798376.1	EST_HUMAN	607309465F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3631000 5'
1813	11710	21588	2.23	8.0E-58	11434921	NT	607309465F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3630211 5'
1813	11710	21589	2.23	8.0E-58	11434921	NT	tr34b07.x1 NCL_CGAP_Ov23 Homo sapiens cDNA clone IMAGE:2220181 3' similar to TR:O15475 O15475
2945	12872		2.83	8.0E-58	7706132	NT	UNNAMED HERV-H PROTEIN;
8231	18112		5.61	7.0E-58	5174542	NT	UNNAMED HERV-H PROTEIN;
8300	18179	28425	3.25	7.0E-58	AW504109.1	EST_HUMAN	Homo sapiens putative protein O-mannosyltransferase (POMT2), mRNA
8300	18179	28426	3.25	7.0E-58	AW504109.1	EST_HUMAN	Homo sapiens putative protein O-mannosyltransferase (POMT2), mRNA
2207	12094	21997	0.9	6.0E-58	BE395081.1	EST_HUMAN	Homo sapiens DHHC1 protein (LOC51304), mRNA
2324	12205	22105	2.96	6.0E-58	AU130689	EST_HUMAN	Homo sapiens MADS box transcription enhancer factor 2, polypeptide B (myocyte enhancer factor 2B) (MEF2B) mRNA
2871	12798	22592	1.19	6.0E-58	BE242150.1	EST_HUMAN	UI-HF-BNO-ali-g-10-0-UI.r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3079867 5'
2871	12798	22593	1.19	6.0E-58	BE242150.1	EST_HUMAN	UI-HF-BNO-ali-g-10-0-UI.r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3079867 5'
7909	17759	28000	1.3	6.0E-58	11434746	NT	607309465F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3631000 5'
9492	19109		1.8	6.0E-58	11526291	NT	607309465F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3631000 5'
							AU130689 NT2RP3 Homo sapiens cDNA clone NT2RP3001263 5'
							TCAAP1E1219 Pediatric acute myelogenous leukemia cell (FAB M1) Baylor-HGSC project=TCAA Homo sapiens cDNA clone TCAAP1219
							TCAAP1E1219 Pediatric acute myelogenous leukemia cell (FAB M1) Baylor-HGSC project=TCAA Homo sapiens cDNA clone TCAAP1219
							sapiens cDNA clone TCAAP1219
							Homo sapiens protein tyrosine phosphatase, non-receptor type 21 (PTPN21), mRNA
							Homo sapiens hypothetical protein FLJ20454 (FLJ20454), mRNA

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Table 4
Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
297	10261	20081	2.9	5.0E-58	4507334	NT	Homo sapiens synaptotagmin 1 (SYNJ1), mRNA
693	10626	20451	5.87	5.0E-58	BE763984.1	EST_HUMAN	RC4-NT0057-160600-016-b05 NT0057 Homo sapiens cDNA
1176	11088	20932	4.47	5.0E-58	AW797948.1	EST_HUMAN	CM3-UM0043-240300-127-e07 UM0043 Homo sapiens cDNA
1176	11088	20933	4.47	5.0E-58	AW797948.1	EST_HUMAN	CM3-UM0043-240300-127-e07 UM0043 Homo sapiens cDNA
1177	11088	20932	2.99	5.0E-58	AW797948.1	EST_HUMAN	CM3-UM0043-240300-127-e07 UM0043 Homo sapiens cDNA
1177	11088	20933	2.99	5.0E-58	AW797948.1	EST_HUMAN	CM3-UM0043-240300-127-e07 UM0043 Homo sapiens cDNA
3281	13202	23002	3.56	5.0E-58	AA988183.1	EST_HUMAN	cr98e07.s1 NCL_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1603908.3
5458	16378		2.21	5.0E-58	11496282	NT	Homo sapiens placenta-specific 1 (PLAC1), mRNA
5748	15656	25704	5.86	5.0E-58	H23072.1	EST_HUMAN	ym51h07.r1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:52071.5
5894	15800	25924	1.45	5.0E-58	11421330	NT	Homo sapiens apical protein, Xenopus laevis-like (APXL), mRNA
6647	16527	26721	6.77	5.0E-58	8922633	NT	Homo sapiens hypothetical protein FLJ10926 (FLJ10926), mRNA
7829	17679	27923	1.56	5.0E-58	AL163218.2	NT	Homo sapiens chromosome 21 segment H521C018
9215	19650		3.26	5.0E-58	11526293	NT	Homo sapiens cat eye syndrome chromosome region, candidate 1 (CECR1), mRNA
9876	19362		2.49	5.0E-58	11418177	NT	Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA
369	10325	20147	17.97	4.0E-58	4502302	NT	Homo sapiens ATP synthase, H+ transporting, mitochondrial F1 complex, O subunit (oligomycin sensitivity conferring protein) (ATP5O) mRNA
779	10709	20548	1.58	4.0E-58	4504634	NT	Homo sapiens interleukin 10 receptor, beta (IL10RB), mRNA
1452	11357	21221	1.24	4.0E-58	4503648	NT	Homo sapiens coagulation factor IX (plasma thromboplastin component, Christmas disease, hemophilia B) (F9) mRNA
2531	12405	22297	0.97	4.0E-58	AF265555.1	NT	Homo sapiens ubiquitin-conjugating BIR-domain enzyme APOLLON mRNA, complete cds
2590	12461	22351	2.7	4.0E-58	U36251.1	NT	Human beta-prime-adaptin (BAM22) gene, exon 3
3283	13204	23004	1.1	4.0E-58	D16470.1	NT	Human mRNA, Xq terminal portion
3680	13594	23380	2.11	4.0E-58	5031660	NT	Homo sapiens EGF-like repeats and discoidin I-like domains 3 (EDIL3), mRNA
8651	18515	28798	7.54	4.0E-58	11424059	NT	Homo sapiens E1B-55kDa-associated protein 5 (E1B-AP5), mRNA
332	10291		1.17	3.0E-58	R17879.1	EST_HUMAN	yg10e02.r1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:31693.5
1367	11273	21129	2.34	3.0E-58	4758981	NT	Homo sapiens peptide YY (PYY) mRNA
3141	13066	22864	2.91	3.0E-58	BF569848.1	EST_HUMAN	602185789F1 NIH_MGC_45 Homo sapiens cDNA clone IMAGE:4309943.5
3141	13066	22865	2.91	3.0E-58	BF569848.1	EST_HUMAN	602185789F1 NIH_MGC_45 Homo sapiens cDNA clone IMAGE:4309943.5
8002	15907	26031	1.39	3.0E-58	AV712977.1	EST_HUMAN	AV712977 DCA Homo sapiens cDNA clone DCAAZG04.5
925	10950	20698	8.16	2.0E-58	AF068624.1	NT	Homo sapiens 5-aminolevulinic synthase 2 (ALAS2) gene, complete cds
1268	11175		12.06	2.0E-58	BE208532.1	EST_HUMAN	ba08b07.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823733.5 similar to gb:X69391.60S RIBOSOMAL PROTEIN L6 (HUMAN); gb:X81987.M.musculus mRNA for TAX responsive element binding protein (MOUSE);
5288	19441	24986	4.42	2.0E-58	BE907186.1	EST_HUMAN	601499861F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3901911.5

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5288	19441	25010	4.42	2.0E-58	BE907186.1	EST_HUMAN	G01499661F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3901911 5'
							am57e02.x1 Johnston frontal cortex Homo sapiens cDNA clone IMAGE:1539674 3' similar to WP:ZK328.1 CE05065 UBIQUITIN CONJUGATING ENZYME1; RECOVERIN SUBFAMILY OF EF-HAND CALCIUM BINDING PROTEIN;
5721	15628	25731	1.74	2.0E-58	A124874.1	EST_HUMAN	Homo sapiens endocytic receptor Endo180 (ENDO180) mRNA, complete cds
6246	16112	26263	2.76	2.0E-58	AF134838.1	NT	Homo sapiens endocytic receptor Endo180 (ENDO180) mRNA, complete cds
6246	16112	26264	2.76	2.0E-58	AF134838.1	NT	Homo sapiens endocytic receptor Endo180 (ENDO180) mRNA, complete cds
8123	18011	28258	10.79	2.0E-58	BF307745.1	EST_HUMAN	G01890812F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4131891 5'
8332	18209	28459	2.26	2.0E-58	AW872641.1	EST_HUMAN	Hm25f08.x1 NCI_CGAP_Thy4 Homo sapiens cDNA clone IMAGE:3013671 3'
705	10638	20463	0.93	1.0E-58	M65134.1	NT	Human complement component C5 mRNA, 3'end
1052	10969	20811	5.45	1.0E-58	6274649	NT	Homo sapiens NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 9 (22kD, B22) (NDUFB9), mRNA
1305	11212	21067	2.17	1.0E-58	AW957182.1	EST_HUMAN	EST369252 MAGe resequences, MAGD Homo sapiens cDNA
1305	11212	21068	2.17	1.0E-58	AW957182.1	EST_HUMAN	EST369252 MAGe resequences, MAGD Homo sapiens cDNA
1375	11281	21136	1.07	1.0E-58	AJ238093.1	NT	Homo sapiens partial AF-4 gene, exons 2 to 7 and Alu repeat elements
1641	11545	21406	2.02	1.0E-58	BE466132.1	EST_HUMAN	hy10f08.x1 NCI_CGAP_GC6 Homo sapiens cDNA clone IMAGE:3196935 3'
2771	12633	22627	0.96	1.0E-58	4759169	NT	Homo sapiens sterol regulatory element binding transcription factor 2 (SREBF2) mRNA
3493	13409	23215	0.98	1.0E-58	4758081	NT	Homo sapiens chondroitin sulfate proteoglycan 2 (versican) (CSPG2) mRNA
3493	13409	23216	0.98	1.0E-58	4758081	NT	Homo sapiens chondroitin sulfate proteoglycan 2 (versican) (CSPG2) mRNA
3659	13573	23360	0.84	1.0E-58	4507628	NT	Homo sapiens transition protein 1 (during histone to prolamine replacement) (TNPT1) mRNA
4627	14515	24306	0.89	1.0E-58	M95963.1	NT	Human prohormone converting enzyme (NEC2) gene, exon 4
4895	14775	24553	4.86	1.0E-58	A1141063.1	EST_HUMAN	oz43h01.x1 Scores_NHMPu_S1 Homo sapiens cDNA clone IMAGE:1678129 3'
7146	17023	27217	6.7	1.0E-58	4505314	EST_HUMAN	Homo sapiens myomesin (M-protein) 2 (165kD) (MYOM2), mRNA
8985	18790		3.46	1.0E-58	XG3392.1	NT	H. sapiens immunoglobulin kappa light chain variable region L14
2182	12069	21971	27.47	8.0E-59	4507378	NT	Homo sapiens TATA box binding protein (TBP) mRNA
6759	16638	26826	1.2	8.0E-59	A1761963.1	EST_HUMAN	wh50d06.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2384171 3'
171	12680		1.63	6.0E-59	BF035327.1	EST_HUMAN	G01458531F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3862086 5'
3088	13015	22807	6.21	5.0E-59	A1807484.1	EST_HUMAN	wf48c11.x1 Scores_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2358836 3'
4559	14451	24237	5.85	5.0E-59	X83497.1	NT	H. sapiens DNA for ZNF80-linked ERV9 long terminal repeat
							au66c07.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2781228 3' similar to contains element TAR1 repetitive element;
6173	15130	24850	7.46	5.0E-59	AW162304.1	EST_HUMAN	AV762869 MDS Homo sapiens cDNA clone MDSEIC12 5'
7596	17447	27662	1.71	5.0E-59	AV762869.1	EST_HUMAN	Homo sapiens hypothetical protein (LOC57143), mRNA
8278	18168	28399	2.8	5.0E-59	11434608	NT	Human mRNA for KIAA0184 gene, partial cds
776	10706	20546	2.42	4.0E-59	D80006.1	NT	Homo sapiens ryanodine receptor 3 (RYR3) mRNA
4685	14571	24368	1.2	4.0E-59	4506758	NT	

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4685	14571	24369	1.2	4.0E-59	4506758	NT	Homo sapiens ryanodine receptor 3 (RYR3) mRNA
9386	19586		2.16	4.0E-59	AF057720.1	NT	Homo sapiens 17-beta-hydroxysteroid dehydrogenase IV (HSD17B4) gene, promoter region and exon 1
9	9995		5.96	3.0E-59	AW965524.1	EST_HUMAN	EST377582 IMAGE resequences, MAGI Homo sapiens cDNA
221	10191	20002	4.12	3.0E-59	7682247	NT	Homo sapiens KIAA0680 gene product (KIAA0680), mRNA
1682	11584	21455	9.87	3.0E-59	4505860	NT	Homo sapiens pleiotrophin activator, tissue (PLATa) mRNA
1682	11584	21456	9.87	3.0E-59	4505860	NT	Homo sapiens pleiotrophin activator, tissue (PLATa) mRNA
2082	11972	21866	7.68	3.0E-59	AB028035.1	NT	Homo sapiens mRNA for KIAA1112 protein, partial cds
2082	11972	21867	7.68	3.0E-59	AB028035.1	NT	Homo sapiens mRNA for KIAA1112 protein, partial cds
3090	13017	22811	3.71	3.0E-59	4502014	NT	Homo sapiens A kinase (PRKA) anchor protein 1 (AKAP1), mRNA
3090	13017	22812	3.71	3.0E-59	4502014	NT	Homo sapiens A kinase (PRKA) anchor protein 1 (AKAP1), mRNA
3763	13666	23449	1.17	3.0E-59	4508044	NT	Homo sapiens zona pellucida glycoprotein 2 (sperm receptor) (ZP2) mRNA
4683	14569	24366	1.07	3.0E-59	4759329	NT	Homo sapiens Testis-specific XK-related protein on Y (XKRY) mRNA
4734	14619	24406	1.85	3.0E-59	7427522	NT	Homo sapiens protein tyrosine phosphatase, receptor type, T (PTPRT), mRNA
5772	15679	25786	2.03	3.0E-59	8924074	NT	Homo sapiens hypothetical protein PRO1741 (PRO1741), mRNA
6352	16215	26377	1.82	3.0E-59	5454137	NT	Homo sapiens nuclear receptor co-repressor 1 (NCOR1), mRNA
6629	16509	26697	1.23	3.0E-59	X12556.1	NT	Human mRNA for dbi proto-oncogene
6629	16509	26698	1.23	3.0E-59	X12556.1	NT	Human mRNA for dbi proto-oncogene
9333	19014		1.64	3.0E-59	11417866	NT	Homo sapiens gamma-glutamyltransferase-like activity 1 (GGTLA1), mRNA
9474	19101		3.9	3.0E-59	11417866	NT	Homo sapiens gamma-glutamyltransferase-like activity 1 (GGTLA1), mRNA
7555	17406		5.01	2.0E-59	AA309774.1	EST_HUMAN	EST1806833 Jurkat T-cells V Homo sapiens cDNA 5' end
8003	17853		2.47	2.0E-59	BF365554.1	EST_HUMAN	RC0-NT0036-100700-032-a07 NT0036 Homo sapiens cDNA
8205	18089	28341	1.84	2.0E-59	AW410698.1	EST_HUMAN	fn07h04.x1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2961654 5'
8205	18089	28342	1.84	2.0E-59	AW410698.1	EST_HUMAN	fn07h04.x1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2961654 5'
9235	18953	25359	5.14	2.0E-59	AI631809.1	EST_HUMAN	wa36c12.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2300182 3' similar to TR:Q86542
9756	19611	24997	2.75	2.0E-59	L11645.1	NT	Q86542 RTVL-H PROTEIN, contains LTR7, b1 LTR7 repetitive element ;
157	10131		3.58	1.0E-59	BE206411.1	EST_HUMAN	Homo sapiens alpha-tubulin mRNA, complete cds
2575	12446		2.46	1.0E-59	AA748498.1	EST_HUMAN	601176757F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3531927 5'
6463	16322	26488	1.29	1.0E-59	AJ130894.1	NT	oa56h11.1 s1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1306029 3' similar to TR:Q13637
7400	17318	27524	1.22	1.0E-59	11419630	NT	Q13637 MER37 TRANSPOSABLE ELEMENT, COMPLETE CONSENSUS SEQUENCE ;
8229	16322	26488	8.32	1.0E-59	AJ130894.1	NT	Homo sapiens mRNA for transcription factor
1455	11360	21224	2.71	8.0E-60	4759159	NT	Homo sapiens zinc finger protein 275 (ZNF275), mRNA
							Homo sapiens mRNA for transcription factor
							Homo sapiens small nuclear ribonucleoprotein D3 polypeptide (18kD) (SNRPD3) mRNA

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Table 4
Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2125	12013	21911	2.7	8.0E-60	5174656	NT	Homo sapiens differentiation-related gene 1 (nickel-specific induction protein) (RTP) mRNA
2125	12013	21912	2.7	8.0E-60	5174656	NT	Homo sapiens differentiation-related gene 1 (nickel-specific induction protein) (RTP) mRNA
5640	15553	25845	1.41	8.0E-60	AB028004.1	NT	Homo sapiens mRNA for KIAA1081 protein, partial cds
6644	16524	26718	2.6	8.0E-60	X17033.1	NT	Human mRNA for integrin alpha-2 subunit
7174	17051	27240	2.26	8.0E-60	11428949	NT	Homo sapiens S-antigen; retina and pineal gland (arrestin) (SAG), mRNA
7451	17260	27465	1.68	8.0E-60	11417118	NT	Homo sapiens KIAA0433 protein (KIAA0433), mRNA
7451	17260	27466	1.68	8.0E-60	11417118	NT	Homo sapiens KIAA0433 protein (KIAA0433), mRNA
8207	18091	28344	5.38	8.0E-60	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
8207	18091	28345	5.38	8.0E-60	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
737	10669	20504	6.69	7.0E-60	AF055066.1	NT	Homo sapiens MHC class 1 region
738	10669	20504	32.94	7.0E-60	AF055066.1	NT	Homo sapiens MHC class 1 region
798	10727	20567	1.15	7.0E-60	4504634	NT	Homo sapiens interleukin 10 receptor, beta (IL10RB), mRNA
2081	11971	21865	1.56	7.0E-60	AF077188.1	NT	Homo sapiens cullin 4A (CUL4A) mRNA, complete cds
4088	13988	23765	2.63	7.0E-60	4505488	NT	Homo sapiens ornithine decarboxylase 1 (ODC1) mRNA
7412	17279	27488	3.28	7.0E-60	H59041.1	EST_HUMAN	Yr1204.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:205087 5' similar to contains LTR5 repetitive element ;
8671	18559	28843	1.96	7.0E-60	H58041.1	EST_HUMAN	Yr1204.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:205087 5' similar to contains LTR5 repetitive element ;
6914	16792		7.13	6.0E-60	H52456.1	EST_HUMAN	Yr78h09.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:201963 5' similar to contains OFR repetitive element ;
78	10062	19878	1.94	5.0E-60	A1807917.1	EST_HUMAN	wf52c07.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2359212 3'
78	10062	19879	1.94	5.0E-60	A1807917.1	EST_HUMAN	wf52c07.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2359212 3'
2188	12075	21979	0.93	4.0E-60	AW503208.1	EST_HUMAN	UI-HF-BND-akt-g-07-Q-UI.r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3078348 5'
2188	12075	21980	0.93	4.0E-60	AW503208.1	EST_HUMAN	UI-HF-BND-akt-g-07-Q-UI.r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3078348 5'
2942	12869		1.12	4.0E-60	AA299037.1	EST_HUMAN	EST11498 Uterus Homo sapiens cDNA 5' end similar to similar to retrovirus-related pol
1815	11712	21591	4.85	3.0E-60	BE562611.1	EST_HUMAN	601336446F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3690395 5'
1815	11712	21592	4.85	3.0E-60	BE562611.1	EST_HUMAN	601336446F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3690395 5'
1826	11723		2.22	3.0E-60	6031190	NT	Homo sapiens prohibitin (PHB) mRNA
4354	14250	24035	2.08	3.0E-60	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
5463	15383	25443	2.06	3.0E-60	AW836196.1	EST_HUMAN	RC3-LT0023-200100-012-a01 LT0023 Homo sapiens cDNA
6153	15111	24875	1.31	3.0E-60	A192814.1	EST_HUMAN	o60h11.v6 NCL_CGAP_Kid3 Homo sapiens cDNA clone IMAGE:1534053 5' similar to SW:UDP_MOUSE P52624 URIDINE PHOSPHORYLASE ;
6896	16775	26668	5.4	3.0E-60	5174644	NT	Homo sapiens proline dehydrogenase (proline oxidase) (PRODH) mRNA
6896	16775	26669	5.4	3.0E-60	5174644	NT	Homo sapiens proline dehydrogenase (proline oxidase) (PRODH) mRNA

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6990	16867	27061	2.59	3.0E-60	AI040235.1	EST_HUMAN	ox56d09.x1 Soares_NH-IMPu_S1 Homo sapiens cDNA clone IMAGE:1660337 3' similar to SW:FORM_MOUSE Q05960 FORMIN;
7077	16954	27147	4.7	3.0E-60	5174644	NT	Homo sapiens proline dehydrogenase (proline oxidase) (PRODH) mRNA
7569	17420	27637	3.84	3.0E-60	BF102612.1	EST_HUMAN	601646227F1 NIH_MGC_60 Homo sapiens cDNA clone IMAGE:3930990 5'
28	10015	19810	1.79	2.0E-60	AY008285.1	NT	Homo sapiens solute carrier (SLC25A18) mRNA, complete cds; nuclear gene for mitochondrial product
1405	11310	21171	2.89	2.0E-60	Z11694.1	NT	H.sapiens 41kDa protein kinase related to rat ERK2
1691	11593	21462	1.29	2.0E-60	M24603.1	NT	Human bor protein mRNA, 5' end
3839	13750	23543	0.78	2.0E-60	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
5910	15816	25941	1.57	2.0E-60	AF004877.1	NT	Homo sapiens pro-alpha 2(I) collagen (COL1A2) gene, complete cds
6093	15103	24980	2.44	2.0E-60	4503044	NT	Homo sapiens corticotropin releasing hormone receptor 2 (ORHR2) mRNA
6093	15103	24981	2.44	2.0E-60	4503044	NT	Homo sapiens corticotropin releasing hormone receptor 2 (ORHR2) mRNA
6222	16088	26238	3.22	2.0E-60	AA311159.1	EST_HUMAN	EST181949 Jurkat T-cells V Homo sapiens cDNA 5' end similar to prothymosin, alpha
6222	16088	26239	3.22	2.0E-60	AA311159.1	EST_HUMAN	EST181949 Jurkat T-cells V Homo sapiens cDNA 5' end similar to prothymosin, alpha
7145	17022	27216	3.86	2.0E-60	L36033.1	NT	Human pre-B cell stimulating factor homologue (SDF1b) mRNA, complete cds
7732	17582	27806	1.89	2.0E-60	11991659	NT	Homo sapiens sema domain, transmembrane domain (TM), and cytoplasmic domain, (semaphorin) 6A (SEMA6A), mRNA
7732	17582	27807	1.89	2.0E-60	11991659	NT	Homo sapiens sema domain, transmembrane domain (TM), and cytoplasmic domain, (semaphorin) 6A (SEMA6A), mRNA
9509	19123		2.86	2.0E-60	11418192	NT	Homo sapiens non-histone chromosome protein 2 (S. cerevisiae)-like 1 (NHP2L1), mRNA
9639	19573		1.31	2.0E-60	AF068757.1	NT	Homo sapiens somatostatin receptor subtype 3 (SSTR3) gene, 5' flanking region and partial cds
9641	19209		1.46	2.0E-60	11418068	NT	Homo sapiens similar to HSPC022 protein (H. sapiens) (LOC63504), mRNA
9658	19220		1.47	2.0E-60	AB071399.1	NT	Homo sapiens gene for AF-8, complete cds
9957	19420	25169	1.4	2.0E-60	11418157	NT	Homo sapiens calcium channel, voltage-dependent, alpha 1I subunit (CACNA1I), mRNA
511	10453	20264	1.56	1.0E-60	BE178696.1	EST_HUMAN	PM3-HT0605-270200-001-e06 HT0605 Homo sapiens cDNA
3827	13739	23631	1.12	1.0E-60	AU143389.1	EST_HUMAN	AU143389 Y79AA1 Homo sapiens cDNA clone Y79AA1001854 5'
4874	14754	24533	1.1	1.0E-60	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
7086	18963		2.9	1.0E-60	AA244041.1	EST_HUMAN	nc04e12.t1 NCI_CGAP_Pr1 Homo sapiens cDNA clone IMAGE:1007182 similar to contains L1.t1 L1 repetitive element;
7101	18978	27170	1.58	1.0E-60	AV754081.1	EST_HUMAN	AV754081 TP Homo sapiens cDNA clone TPGAED05 5'
1063	10999	20840	1.9	9.0E-61	AU119344.1	EST_HUMAN	AU119344 HEMBA1 Homo sapiens cDNA clone HEMBA1005583 5'
2635	12502	22395	1.39	8.0E-61	AW006478.1	EST_HUMAN	w05b10.x1 NCI_CGAP_Co3 Homo sapiens cDNA clone IMAGE:2506555 3'
2635	12502	22396	1.39	8.0E-61	AW006478.1	EST_HUMAN	w05b10.x1 NCI_CGAP_Co3 Homo sapiens cDNA clone IMAGE:2506555 3'
2921	12848		1.74	8.0E-61	X57147.1	NT	Human endogenous retrovirus pHE.1 (ERV9)

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Table 4.

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
122	10098	19918	0.94	7.0E-61	7706670	NT	Homo sapiens PXR2b protein (PXR2b), mRNA
122	10098	19919	0.94	7.0E-61	7706670	NT	Homo sapiens PXR2b protein (PXR2b), mRNA
123	10098	19918	0.86	7.0E-61	7706670	NT	Homo sapiens PXR2b protein (PXR2b), mRNA
123	10098	19919	0.86	7.0E-61	7706670	NT	Homo sapiens PXR2b protein (PXR2b), mRNA
265	10230	20045	2	6.0E-61	BE409310.1	EST_HUMAN	601300938F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3635480 5'
794	10723	20564	1.69	6.0E-61	BE409310.1	EST_HUMAN	601300938F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3635480 5'
1299	11206	21060	10.28	6.0E-61	AF119860.1	NT	Homo sapiens PRO2014 mRNA, complete cds
1612	11516	21376	0.95	6.0E-61	BE257400.1	EST_HUMAN	601109238F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3330145 5'
1628	11532	21392	2.12	6.0E-61	AA596033.1	EST_HUMAN	601109238F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3330145 5'
3266	13189	22987	8.19	6.0E-61	AU130639.1	EST_HUMAN	601300938F1 NIH_MGC_21 Homo sapiens cDNA clone NT2RP3001263 5'
5674	15583	25984	2.92	6.0E-61	S79249.1	NT	Ig-beta/B29-CD79b (alternatively spliced) [human, B cells, mRNA Partial, 375 nt]
6344	16207	26370	1.93	6.0E-61	U24498.1	NT	Human autosomal dominant polycystic kidney disease protein 1 (PKD1) gene
6492	16351	26521	2.03	6.0E-61	AF035737.1	NT	Homo sapiens general transcription factor 2-I (GTF2I) mRNA, complete cds
9417	10723	20564	1.43	6.0E-61	BE409310.1	EST_HUMAN	601300938F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3635480 5'
1655	11558	21421	1.78	5.0E-61	4506008	NT	Homo sapiens protein phosphatase 1, regulatory subunit 10 (PPP1R10) mRNA
3000	12928	22720	1.92	5.0E-61	AL163279.2	NT	Homo sapiens chromosome 21 segment HS21C079
3114	13039	22835	0.84	5.0E-61	AB020632.1	NT	Homo sapiens mRNA for KIAA0825 protein, partial cds
3161	13086	22890	1.9	5.0E-61	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
3899	13809		1.68	5.0E-61	AJ229041.1	NT	Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22; segment 1/3
9213	18941		2.76	4.0E-61	AV731140.1	EST_HUMAN	AV731140 HTF Homo sapiens cDNA clone HTFARB01 5'
4119	14019	23797	1.13	3.0E-61	BE396279.1	EST_HUMAN	601309785F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3631220 5'
490	10433	20246	1.5	2.0E-61	8922828	NT	Homo sapiens hypothetical protein FLJ11026 (FLJ11026), mRNA
1194	11104	20950	1.35	2.0E-61	BE168410.1	EST_HUMAN	QV3-HT0513-060400-147-d01 HT0513 Homo sapiens cDNA
1194	11104	20951	1.35	2.0E-61	BE168410.1	EST_HUMAN	QV3-HT0513-060400-147-d01 HT0513 Homo sapiens cDNA
1642	11546	21407	1.31	2.0E-61	N53039.1	EST_HUMAN	yw53d11.s1 Soares fetal liver spleen 1NFSL Homo sapiens cDNA clone IMAGE:246453 3' similar to
2109	11998	21897	1.41	2.0E-61	4758003	NT	gb:L25444.60S RIBOSOMAL PROTEIN L35A (HUMAN);
2604	12472		1.16	2.0E-61	N39397.1	EST_HUMAN	Homo sapiens calnexin (CLGN), mRNA
5871	15777	25896	1.7	2.0E-61	11426166	NT	yw03f11.r1 Soares melanocyte 2N6HM Homo sapiens cDNA clone IMAGE:270189 5'
7212	17089	27279	1.33	2.0E-61	AV694317.1	EST_HUMAN	Homo sapiens ATPase, H+ transporting, lysosomal (vacuolar proton pump) non-catalytic accessory protein 1A (110/111kD) (ATP9A1A), mRNA
7707	17557	27783	1.62	2.0E-61	AW500256.1	EST_HUMAN	AV694317 GKC Homo sapiens cDNA clone GKCCEL006 5'
7885	17735	27979	3.09	2.0E-61	11421778	NT	UI-HF-BNO-akd-f-12-0-LJI.1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3076774 5'
							Homo sapiens polymerase (RNA) III (DNA directed) (39kD) (RPC39), mRNA

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Table 4
Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8258	18138		7.14	2.0E-61	11419729	NT	Homo sapiens ribosomal protein L44 (RPL44), mRNA
428	10373		0.85	1.0E-61	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
766	10686	20524	1.32	1.0E-61	5453829	NT	Homo sapiens origin recognition complex, subunit 2 (yeast homolog)-like (ORC2L) mRNA
1377	11283	21138	1.09	1.0E-61	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
1731	11632		0.97	1.0E-61	U32657.1	NT	Human polymorphic trinucleotide repeat in X-linked retinitis pigmentosa (RP3) gene region
1814	11711	21590	4.47	1.0E-61	6005993	NT	Homo sapiens zona pellucida glycoprotein 3A (sperm receptor) (ZP3A), mRNA
2150	12038	21935	1.49	1.0E-61	AW827281.1	EST_HUMAN	xn11509.y1 NCL_CGAP_Li5 Homo sapiens cDNA clone IMAGE:2693369 5' similar to contains element MSR1 repetitive element ;
2804	12734	22833	1.67	1.0E-61	BE386363.1	EST_HUMAN	601273513F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3614867 5'
3330	13250	23055	0.88	1.0E-61	7662319	NT	Homo sapiens KIAA0806 gene product (KIAA0806), mRNA
3671	13685	23372	1.47	1.0E-61	BE174455.1	EST_HUMAN	QV2-HT0577-140300-077-g06 HT0577 Homo sapiens cDNA
4339	14236	24019	0.95	1.0E-61	4759249	NT	Homo sapiens TRAF family member-associated NFKB activator (TANK) mRNA
4339	14236	24020	0.95	1.0E-61	4759249	NT	Homo sapiens TRAF family member-associated NFKB activator (TANK) mRNA
4751	14636	24422	7.63	1.0E-61	AW298181.1	EST_HUMAN	UI-H-BW0-ajit-b-08-0-UI.s1 NCL_CGAP_Sub6 Homo sapiens cDNA clone IMAGE:2732871 3'
4751	14636	24423	7.63	1.0E-61	AW298181.1	EST_HUMAN	UI-H-BW0-ajit-b-08-0-UI.s1 NCL_CGAP_Sub6 Homo sapiens cDNA clone IMAGE:2732871 3'
4878	14758	24535	0.85	1.0E-61	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
6124	15971	26107	7.19	1.0E-61	M30135.1	NT	Human P40 T-cell and mast cell growth factor (hP40) gene, complete cds
6288	16133	26287	1.4	1.0E-61	8923130	NT	Homo sapiens hypothetical protein FLJ20128 (FLJ20128), mRNA
6288	16133	26288	1.4	1.0E-61	8923130	NT	Homo sapiens hypothetical protein FLJ20128 (FLJ20128), mRNA
6729	16609	26900	3.38	1.0E-61	11034940	NT	Homo sapiens growth hormone releasing hormone (GHRH), mRNA
6838	16717	26910	3.59	1.0E-61	AF224569.1	NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
7348	17216		2.79	1.0E-61	AW998726.1	EST_HUMAN	MR0-BN0070-040400-010-h01 BN0070 Homo sapiens cDNA
7703	17613	27840	6.28	1.0E-61	11428892	NT	Homo sapiens KIAA0971 protein (KIAA0971), mRNA
8031	17923	28169	1.96	1.0E-61	11425578	NT	Homo sapiens actinin, alpha 4 (ACTN4), mRNA
9110	19631		1.26	1.0E-61	AB011399.1	NT	Homo sapiens gene for AF-6, complete cds
9149	19620	25002	2.96	1.0E-61	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
9149	19620	25003	2.96	1.0E-61	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
9515	19128	25261	1.8	1.0E-61	M20809.1	NT	Human kappa-immunoglobulin germline pseudogene (Chrl) variable region (subgroup V kappa I)
9805	19317	25205	8.25	1.0E-61	11418127	NT	Homo sapiens GTP binding protein 1 (GTPBP1), mRNA
4451	14345	24138	0.79	8.0E-62	AA830420.1	EST_HUMAN	oc66h1.1.s1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1354725 3' similar to SW:POL_MLVRK
9953	19417		1.56	8.0E-62	AA768861.1	EST_HUMAN	p3795 POL POLYPROTEIN ;
1091	11007	20848	1.27	7.0E-62	AV714334.1	EST_HUMAN	nz75g01.s1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:1301328 3'
							AV714334 DCB Homo sapiens cDNA clone DCBAMA08 5'

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3462	13378	23184	0.79	7.0E-62	P17480	SWISSPROT	NUCLEOLAR TRANSCRIPTION FACTOR 1 (UPSTREAM BINDING FACTOR 1) (UBF-1) (AUTOANTIGEN NOR-90)
8657	18546	28829	4	7.0E-62	A1208681.1	EST_HUMAN	qg56a04.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1839150 3' similar to TR:O15103 O15103 HYPOTHETICAL 27.3 KD PROTEIN. ;
2969	12896		1.07	6.0E-62	U09410.1	NT	Human zinc finger protein ZNF131 mRNA, partial cds
3338	13258		3.93	6.0E-62	11418255	NT	Homo sapiens CGI-56 protein (CGI-56), mRNA
6496	16355	26525	3.33	6.0E-62	A1762801.1	EST_HUMAN	wf04d02.x1 NCI_CGAP_CLL1 Homo sapiens cDNA clone IMAGE:2389251 3'
6496	16355	26526	3.33	6.0E-62	A1762801.1	EST_HUMAN	wf04d02.x1 NCI_CGAP_CLL1 Homo sapiens cDNA clone IMAGE:2389251 3'
6804	16883	26873	1.4	6.0E-62	11431139	NT	Homo sapiens CGI-18 protein (LOC51008), mRNA
7386	17255	27460	2.76	6.0E-62	AW814393.1	EST_HUMAN	MR3-ST0203-130100-025-a09 ST0203 Homo sapiens cDNA
410	10356	20183	1.49	5.0E-62	A1950528.1	EST_HUMAN	wx51e07.x1 NCI_CGAP_Lu28 Homo sapiens cDNA clone IMAGE:2547204 3' similar to SW:GG95_HUMAN Q08379 GOLGIN-95, contains element MER22 repetitive element ;
2356	12236	22132	3.26	5.0E-62	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
2356	12236	22133	3.26	5.0E-62	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
3372	13291	23090	2.17	5.0E-62	4506758	NT	Homo sapiens ryanodine receptor 3 (RYR3) mRNA
4233	14131	23907	1.55	5.0E-62	AA431093.1	EST_HUMAN	zw78e09.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:782344 3' similar to SW:NRDC_RAT P47245 NARDILYSIN ;
7482	17352	27556	6.17	5.0E-62	AW410687.1	EST_HUMAN	fh07g09.x1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2961616 5'
8587	18455	28723	4.91	5.0E-62	11425574	NT	Homo sapiens muscle specific gene (M9), mRNA
8587	18455	28724	4.91	5.0E-62	11425574	NT	Homo sapiens muscle specific gene (M9), mRNA
822	10750	20597	3.47	4.0E-62	AW161479.1	EST_HUMAN	au71d03.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2781701 5' similar to gb:M37104 ATP SYNTHASE COUPLING FACTOR 6, MITOCHONDRIAL PRECURSOR (HUMAN);
822	10750	20598	3.47	4.0E-62	AW161479.1	EST_HUMAN	au71d03.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2781701 5' similar to gb:M37104 ATP SYNTHASE COUPLING FACTOR 6, MITOCHONDRIAL PRECURSOR (HUMAN);
823	10750	20597	4.63	4.0E-62	AW161479.1	EST_HUMAN	au71d03.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2781701 5' similar to gb:M37104 ATP SYNTHASE COUPLING FACTOR 6, MITOCHONDRIAL PRECURSOR (HUMAN);
823	10750	20598	4.63	4.0E-62	AW161479.1	EST_HUMAN	au71d03.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2781701 5' similar to gb:M37104 ATP SYNTHASE COUPLING FACTOR 6, MITOCHONDRIAL PRECURSOR (HUMAN);
1446	11351		0.89	4.0E-62	AA311281.1	EST_HUMAN	EST182043 Jurkat T-cells V Homo sapiens cDNA 5' end
2409	12286	22183	1.39	4.0E-62	A1827900.1	EST_HUMAN	wf12b08.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2350359 3' similar to gb:X57138_mrat HISTONE H2B.2 (HUMAN);
2409	12286	22184	1.39	4.0E-62	A1827900.1	EST_HUMAN	wf12b08.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2350359 3' similar to gb:X57138_mrat HISTONE H2B.2 (HUMAN);
3353	13273		6.6	4.0E-62	4557887	NT	Homo sapiens keratin 18 (KRT18) mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4947	14824		2.03	4.0E-62	AJ243213.1	NT	Homo sapiens partial 5-HT ₄ receptor gene, exons 2 to 5
5809	15524	25606	1.66	4.0E-62	4508978	NT	Homo sapiens solute carrier family 13 (sodium-dependent dicarboxylate transporter), member 2 (SLC13A2) mRNA
5804	15709	28822	2.42	4.0E-62	11420654	NT	Homo sapiens ubiquitin specific protease 9, X chromosome (Drosophila fat facets related) (USP9X), mRNA
6254	16120	26273	1.68	4.0E-62	11421041	NT	Homo sapiens phosphoribosyl pyrophosphate synthetase 2 (PRPS2), mRNA
6498	16357	26528	2.21	4.0E-62	7657057	NT	Homo sapiens eukaryotic translation initiation factor 2B, subunit 2 (beta, 39kD) (EIF2B2), mRNA
6498	16357	26529	2.21	4.0E-62	7657057	NT	Homo sapiens eukaryotic translation initiation factor 2B, subunit 2 (beta, 39kD) (EIF2B2), mRNA
7134	17011	27204	6.3	4.0E-62	AB033089.1	NT	Homo sapiens mRNA for KIAA1263 protein, partial cds
8377	18254	28505	2.43	4.0E-62	Z78766.1	NT	H. sapiens flow-sorted chromosome 6 HindIII fragment, SC6pA16D3
8377	18254	28506	2.43	4.0E-62	Z78766.1	NT	H. sapiens flow-sorted chromosome 6 HindIII fragment, SC6pA16D3
9135	18891	28792	2.95	4.0E-62	11418086	NT	Homo sapiens putative nuclear protein (HRIHFB2122), mRNA
9355	19578		2.98	4.0E-62	11418192	NT	Homo sapiens non-histone chromosome protein 2 (S. cerevisiae) like 1 (NHP2L1), mRNA
9743	19305	25201	1.99	4.0E-62	11418322	NT	Homo sapiens cadherin EGF LA6 seven-pass G-type receptor 1 (GELSR1), mRNA
9792	19302	25198	4.2	4.0E-62	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
9792	19302	25199	4.2	4.0E-62	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
9835	19335	26210	1.51	4.0E-62	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
68	10053	19868	1.12	3.0E-62	4557794	NT	Homo sapiens neurofibronin 2 (bilateral acoustic neuroma) (NF2) mRNA
3008	12936	22728	0.95	3.0E-62	AB040909.1	NT	Homo sapiens mRNA for KIAA1476 protein, partial cds
3008	12936	22729	0.95	3.0E-62	AB040909.1	NT	Homo sapiens mRNA for KIAA1476 protein, partial cds
3640	13554	23340	1.92	3.0E-62	X52858.1	NT	Human cyclophilin-related processed pseudogene
6969	16846	27038	4.35	3.0E-62	A1632733.1	EST_HUMAN	wa33f04.x1 NC1_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2299903 3' similar to contains THR.12
1211	11120	20989	1.5	2.0E-62	AL163284.2	NT	THR repetitive element
7096	16973	27165	4.8	2.0E-62	BF329911.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C084
7096	16973	27166	4.8	2.0E-62	BF329911.1	EST_HUMAN	RCO-BN0284-300500-031-e05 BN0284 Homo sapiens cDNA
7846	17696		3.94	2.0E-62	AF224689.1	NT	RCO-BN0284-300500-031-e05 BN0284 Homo sapiens cDNA
8936	18744		8.93	2.0E-62	BF330676.1	EST_HUMAN	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
1028	10946	20791	1.24	1.0E-62	AF248540.1	NT	QV4-BT0257-081199-017-e03 BT0257 Homo sapiens cDNA
1526	11431	21288	6.83	1.0E-62	L78810.1	NT	Homo sapiens intersectin 2 (SH3D1B) mRNA, complete cds
1758	11667	21528	1.02	1.0E-62	AA625207.1	EST_HUMAN	Homo sapiens ADP/ATP carrier protein (ANT-2) gene, complete cds
2884	12811	22606	1.12	1.0E-62	AL039044.1	EST_HUMAN	af70et1.1 Scores_NHMPu_S1 Homo sapiens cDNA clone IMAGE:1047404 5' similar to WP:K01H12.1 CE03453 ;
							DKFZp566F104_r1 566 (synonym: hfkd2) Homo sapiens cDNA clone DKFZp566F104 5'

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4426	14321	24108	1.32	1.0E-62	8923201	NT	Homo sapiens hypothetical protein FLJ20212 (FLJ20212), mRNA
6236	16102	26251	2.17	1.0E-62	AA722878.1	EST_HUMAN	z989f10.s1 Soares fetal heart Nbh-H19W Homo sapiens cDNA clone IMAGE:409771 3'
6236	16102	26252	2.17	1.0E-62	AA722878.1	EST_HUMAN	z989f10.s1 Soares fetal heart Nbh-H19W Homo sapiens cDNA clone IMAGE:409771 3'
7239	17116	27310	1.53	1.0E-62	7662289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
7239	17116	27311	1.53	1.0E-62	7662289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
7262	17139	27331	1.81	1.0E-62	X15633.1	NT	H. sapiens lysosomal acid phosphatase gene (EC 3.1.3.2) Exon 9
7262	17139	27332	1.81	1.0E-62	X15633.1	NT	H. sapiens lysosomal acid phosphatase gene (EC 3.1.3.2) Exon 9
7512	17300	27507	2.81	1.0E-62	AA469170.1	EST_HUMAN	aa33cd08.s1 NCI CGAP GC31 Homo sapiens cDNA clone IMAGE:815055 3'
8673	18561	28845	2.13	1.0E-62	Z78698.1	NT	H. sapiens flow-sorted chromosome 6 HindIII fragment, SC6pA14D8
9623	19199	27332	1.94	1.0E-62	11418322	NT	Homo sapiens cadherin EGF LAG seven-pass G-type receptor 1 (CELSR1), mRNA
9815	19322	25206	2.3	1.0E-62	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
335	10294	20109	2.14	9.0E-63	AW816405.1	EST_HUMAN	QV4-ST0234-181199-037-05 ST0234 Homo sapiens cDNA
2297	12179		1.51	9.0E-63	C18159.1	EST_HUMAN	C18159 Human placenta cDNA (TFujiwara) Homo sapiens cDNA clone GEN-568C10 5'
3955	13863	23638	7.42	9.0E-63	AB002348.2	NT	Homo sapiens mRNA for KIAA0350 protein, partial cds
3955	13863	23639	7.42	9.0E-63	AB002348.2	NT	Homo sapiens mRNA for KIAA0350 protein, partial cds
5210	15088	29106	6.51	9.0E-63	11418185	NT	Homo sapiens aconitase 2, mitochondrial (ACO2), mRNA
5354	15274	25104	1.31	9.0E-63	Y15056.1	NT	Homo sapiens mRNA for PKB kinase
6262	16127	26281	4.39	9.0E-63	11426985	NT	Homo sapiens nucleoporin 88kD (NUP88), mRNA
6845	16724	26917	1.37	9.0E-63	11421160	NT	Homo sapiens Ras association (RalGDS/AF-6) domain family 2 (RASSF2), mRNA
2296	12178	22077	1.52	8.0E-63	4557734	NT	Homo sapiens monoamine oxidase A (MAOA), nuclear gene encoding mitochondrial protein, mRNA
2322	12203	22102	2.17	8.0E-63	5031810	NT	Homo sapiens IL2-inducible T-cell kinase (ITK), mRNA
3415	13332	23134	3.91	8.0E-63	AF198349.1	NT	Gallus gallus Dach2 protein (Dach2) mRNA, complete cds
3415	13332	23135	3.91	8.0E-63	AF198349.1	NT	Gallus gallus Dach2 protein (Dach2) mRNA, complete cds
4168	14068	23843	3.37	8.0E-63	AL163298.2	NT	Homo sapiens chromosome 21 segment HS21C068
913	10837		1.78	7.0E-63	AB72137.1	EST_HUMAN	wnt55g11.x1 NCI CGAP U12 Homo sapiens cDNA clone IMAGE:2439908 3'
5274	15196		40.51	6.0E-63	AA420803.1	EST_HUMAN	nc63f02.r1 NCI CGAP P11 Homo sapiens cDNA clone IMAGE:745947 similar to gb:Y00361 60S RIBOSOMAL PROTEIN (HUMAN);
3279	13200	23001	0.98	4.0E-63	AL163278.2	NT	Homo sapiens chromosome 21 segment HS21C078
5879	15785	25905	2.86	4.0E-63	AW750372.1	EST_HUMAN	CM3-BT0595-190100-072-a09 BT0595 Homo sapiens cDNA
5879	15785	25906	2.86	4.0E-63	AW750372.1	EST_HUMAN	CM3-BT0595-190100-072-a09 BT0595 Homo sapiens cDNA
8474	18347	28611	2	4.0E-63	AW134709.1	EST_HUMAN	UI-H-B11-abq-a-02-0-UI.s1 NCI CGAP Sub3 Homo sapiens cDNA clone IMAGE:2712482 3'
8474	18347	28612	2	4.0E-63	AW134709.1	EST_HUMAN	UI-H-B11-abq-a-02-0-UI.s1 NCI CGAP Sub3 Homo sapiens cDNA clone IMAGE:2712482 3'
1993	11788	21666	1.97	3.0E-63	AB018260.1	NT	Homo sapiens mRNA for KIAA0717 protein, partial cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2753	12615	22506	1.34	3.0E-63	J00310.1	NT	Human Met-RNA-i gene 1
2701	11127	20078	8.97	3.0E-63	6005963	NT	Homo sapiens zinc finger protein 144 (ZNF144), mRNA
5896	15802	25926	27.69	3.0E-63	11545810	NT	Homo sapiens hepatocellular carcinoma antigen gene 520 (LOC383928), mRNA
7597	17448	27663	1.82	3.0E-63	BE876158.1	EST_HUMAN	601485656F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3888253 5'
7597	17448	27663	1.82	3.0E-63	BE876158.1	EST_HUMAN	601485656F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3888253 5'
184	10156	19972	1.11	2.0E-63	U07804.1	NT	Human DNA topoisomerase I mRNA, partial cds
197	10163	19980	1.74	2.0E-63	4885226	NT	Homo sapiens eyes absent (Drosophila) homolog 2 (EYA2), mRNA
489	10432		1.39	2.0E-63	4557624	NT	Homo sapiens glutamate-cysteine ligase (gamma-glutamylcysteine synthetase), catalytic (72.8kD) (GLCLC) mRNA
809	10738	20583	5.29	2.0E-63	7657042	NT	Homo sapiens Down syndrome candidate region 1 (DSR1), mRNA
1547	11452	21312	2.47	2.0E-63	AB030388.1	NT	Homo sapiens RHCE mRNA for Rh blood OE group antigen polypeptide, complete cds
1547	11452	21313	2.47	2.0E-63	AB030388.1	NT	Homo sapiens RHCE mRNA for Rh blood OE group antigen polypeptide, complete cds
3119	13044	22841	1.68	2.0E-63	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
3248	13171	22970	1.78	2.0E-63	AF109748.1	NT	Homo sapiens chromosome 3 subtelomeric region
3831	13743	23535	1.86	2.0E-63	L39891.1	NT	Homo sapiens polycystic kidney disease-associated protein (PKD1) gene, complete cds
4760	14645	24434	1.13	2.0E-63	AF111167.2	NT	Homo sapiens jun dimerization protein gene, partial cds; ofos gene, complete cds; and unknown gene
5587	15502	25578	2.45	2.0E-63	BF373541.1	EST_HUMAN	QV1-FT0170-040700-265-c05 FT0170 Homo sapiens cDNA
5587	15502	25579	2.45	2.0E-63	BF373541.1	EST_HUMAN	QV1-FT0170-040700-265-c05 FT0170 Homo sapiens cDNA
							Human germline T-cell receptor beta chain Dopamine-beta-hydroxylase-like, TRY1, TRY2, TRY3, TORBV27S1P, TORBV22S1A2N1T, TORBV9S1A1T, TORBV7S1A1N2T, TORBV6S1A1T, TORBV13S3, TORBV6S7P, TORBV7S3A2T, TORBV13S2A1T, TORBV9S2A2PT, TORBV7S2A1N4T, TORBV13S9/13S>
6025	15929	26081	1.37	2.0E-63	U66059.1	NT	Homo sapiens Carbonic anhydrase-related protein 10 (LOC55934), mRNA
6208	15968	26103	1.41	2.0E-63	9910365	NT	Homo sapiens Carbonic anhydrase-related protein 10 (LOC55934), mRNA
6208	15968	26104	1.41	2.0E-63	9910365	NT	Homo sapiens Carbonic anhydrase-related protein 10 (LOC55934), mRNA
6964	16842	27034	3.8	2.0E-63	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
							zb18b05.s1 Soares_fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:302385 3' similar to gb:X17209.40S RIBOSOMAL PROTEIN S4 (HUMAN);
8129	18017	28265	12.54	2.0E-63	N78945.1	EST_HUMAN	Homo sapiens neuraxin III-alpha gene, partial cds
8154	18042	28292	3.02	2.0E-63	AF098810.1	NT	Homo sapiens neuraxin III-alpha gene, partial cds
8154	18042	28293	3.02	2.0E-63	AF098810.1	NT	Homo sapiens neuraxin III-alpha gene, partial cds
9243	19523	25058	10.85	2.0E-63	11418185	NT	Homo sapiens aconitase 2, mitochondrial (ACO2), mRNA
9864	19354	25186	1.39	2.0E-63	11418187	NT	Homo sapiens calcium channel, voltage-dependent, alpha 1I subunit (CACNA1I), mRNA
4246	14145	23918	2.91	1.0E-63	F08485.1	EST_HUMAN	HSC2VD111 normalized infant brain cDNA Homo sapiens cDNA clone c-zvd11

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Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4246	14145	23919	2.91	1.0E-63	F08485.1	EST_HUMAN	HSCZVD111 normalized infant brain cDNA Homo sapiens cDNA clone c-zvd11
5520	15443	25509	1.39	1.0E-63	AW582266.1	EST_HUMAN	QV0-ST0215-060100-083-b09 ST0215 Homo sapiens cDNA
6935	16813		2.3	1.0E-63	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
9879	19633		3.02	1.0E-63	AL163207.2	NT	Homo sapiens chromosome 21 segment HS21C007
6591	16471	26661	4.78	9.0E-64	AL478186.1	EST_HUMAN	tm50b07.x1 NCI_CGAP_Kid111 Homo sapiens cDNA clone IMAGE:2161525 3'
1030	10948		7.89	8.0E-64	BE280796.1	EST_HUMAN	601158232F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3139038 5'
5733	15641	25747	3.16	8.0E-64	BE885755.1	EST_HUMAN	601508968F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3910336 5'
9059	18841		2.61	8.0E-64	11418177	NT	Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA
9111	18875		2.56	8.0E-64	T60651.1	EST_HUMAN	y98b02.11 Stratagene lung (#937210) Homo sapiens cDNA clone IMAGE:79179 5'
3486	13402		0.99	7.0E-64	BE394321.1	EST_HUMAN	6013117456F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3633204 5'
4625	14513	24303	2.44	7.0E-64	4507490	NT	Homo sapiens thimet oligopeptidase 1 (THOP1), mRNA
4625	14513	24304	2.44	7.0E-64	4507490	NT	Homo sapiens thimet oligopeptidase 1 (THOP1), mRNA
7766	17616	27844	2.13	7.0E-64	Y07848.1	NT	Homo sapiens EWS, gar22, rrp22 and bam22 genes
1692	11594	21463	1.7	6.0E-64	A1651992.1	EST_HUMAN	wb51e07.x1 NCI_CGAP_G06 Homo sapiens cDNA clone IMAGE:2309220 3' similar to gb:M15182 BETA-GLUCURONIDASE PRECURSOR (HUMAN);
1692	11594	21464	1.7	6.0E-64	A1651992.1	EST_HUMAN	wb51e07.x1 NCI_CGAP_G06 Homo sapiens cDNA clone IMAGE:2309220 3' similar to gb:M15182 BETA-GLUCURONIDASE PRECURSOR (HUMAN);
3084	13011	22801	3.7	6.0E-64	AW028445.1	EST_HUMAN	wv13e03.x1 NCI_CGAP_Bm23 Homo sapiens cDNA clone IMAGE:2529436 3'
3084	13011	22802	3.7	6.0E-64	AW028445.1	EST_HUMAN	wv13e03.x1 NCI_CGAP_Bm23 Homo sapiens cDNA clone IMAGE:2529436 3'
5454	15375	25433	2.64	6.0E-64	Y18933.1	NT	Homo sapiens MCP-1 gene and enhancer region
5454	15375	25434	2.64	6.0E-64	Y18933.1	NT	Homo sapiens MCP-1 gene and enhancer region
5464	15384	25444	4.41	6.0E-64	M13975.1	NT	Homo sapiens protein kinase C beta-II type (PRKCB1), mRNA, complete cds
6293	16157	26312	2.58	6.0E-64	11525879	NT	Homo sapiens mesenchyme homeo box 1 (MEOX1), mRNA
6293	16157	26313	2.58	6.0E-64	11525879	NT	Homo sapiens mesenchyme homeo box 1 (MEOX1), mRNA
7376	17245	27451	7.8	6.0E-64	11420555	NT	Homo sapiens acetyl-CoA synthetase (LOC55902), mRNA
7472	17332	27538	2.06	6.0E-64	AF274753.1	NT	Homo sapiens progressive ankylosis-like protein (ANK), mRNA, complete cds
7604	17455	27669	2.34	6.0E-64	S76475.1	NT	tkc [human, brain, mRNA, 2715 nt]
8151	18039	28287	7.57	6.0E-64	11420197	NT	Homo sapiens stromal antigen 3 (STAG3), mRNA
8151	18039	28288	7.57	6.0E-64	11420197	NT	Homo sapiens stromal antigen 3 (STAG3), mRNA
9262	18967	25321	4.06	6.0E-64	11526198	NT	Homo sapiens interleukin 10 receptor, beta (IL10RB), mRNA
803	10732	20574	2.44	5.0E-64	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
803	10732	20575	2.44	5.0E-64	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
1402	11307	21167	2.42	5.0E-64	L40933.1	NT	Homo sapiens phosphoglucomutase-related protein (PGMRP) gene, complete cds
1402	11307	21168	2.42	5.0E-64	L40933.1	NT	Homo sapiens phosphoglucomutase-related protein (PGMRP) gene, complete cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1683	11585	21457	1.67	5.0E-64	U99358.1	NT	Human (3)mbt protein homolog mRNA, complete cds
2796	11370	21235	2.66	5.0E-64	7662205	NT	Homo sapiens KIAA0618 gene product (KIAA0618), tRNA
2796	11370	21236	2.66	5.0E-64	7662205	NT	Homo sapiens KIAA0618 gene product (KIAA0618), tRNA
3876	13787	23575	5.61	5.0E-64	AF017433.1	NT	Homo sapiens putative transcription factor OR53 (OR53) mRNA, partial cds
8188	18074	28324	3.9	4.0E-64	AW813783.1	EST_HUMAN	RC3-ST0197-120200-015-a03 ST0197 Homo sapiens cDNA
8188	18074	28325	3.9	4.0E-64	AW813783.1	EST_HUMAN	RC3-ST0197-120200-015-a03 ST0197 Homo sapiens cDNA
2151	12039	21936	3.85	3.0E-64	C18895.1	EST_HUMAN	C18895 Human placenta cDNA (TFujwara) Homo sapiens cDNA clone GEN-569E02 5'
3216	13140	22943	0.95	3.0E-64	BE794381.1	EST_HUMAN	601589565F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3943577 5'
3396	13313	23112	1.51	3.0E-64	AV711714.1	EST_HUMAN	AV711714 DCA Homo sapiens cDNA clone DCAAMC01 5'
3396	13313	23113	1.51	3.0E-64	AV711714.1	EST_HUMAN	AV711714 DCA Homo sapiens cDNA clone DCAAMC01 5'
5703	15611	25713	1.34	3.0E-64	Z26273.1	NT	H. sapiens isoform 1 gene for L-type calcium channel, exon 28
5911	15817	25942	3.39	3.0E-64	BF370000.1	EST_HUMAN	RC6-FN0019-290600-011-G11 FN0019 Homo sapiens cDNA
6933	16811	27005	1.81	3.0E-64	AF248953.1	NT	Homo sapiens golgi matrix protein GM130 (GOLGA2) mRNA, complete cds
6933	16811	27006	1.81	3.0E-64	AF248953.1	NT	Homo sapiens golgi matrix protein GM130 (GOLGA2) mRNA, complete cds
6946	16824	27016	1.3	3.0E-64	BE206521.1	EST_HUMAN	bb72h12.y1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3047975 5' similar to gbL08069 DNAJ PROTEIN HOMOLOG 2 (HUMAN);
6946	16824	27017	1.3	3.0E-64	BE206521.1	EST_HUMAN	bb72h12.y1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3047975 5' similar to gbL08069 DNAJ PROTEIN HOMOLOG 2 (HUMAN);
7422	17289	27497	1.26	3.0E-64	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
7422	17289	27498	1.26	3.0E-64	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
8565	18434	28703	1.76	3.0E-64	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
8565	18434	28704	1.76	3.0E-64	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
8938	18746	29040	4.59	3.0E-64	AL163227.2	NT	Homo sapiens chromosome 21 segment HS21C027
1072	10888	20831	0.94	2.0E-64	AA609940.1	EST_HUMAN	af09d08.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1031151 3'
1376	11282	21137	1.32	2.0E-64	4757701	NT	Homo sapiens eIF4E-like cap-binding protein (4EHP) mRNA
2478	12354		1.78	2.0E-64	AB27030.1	EST_HUMAN	wo87b01.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2462281 3' similar to contains element L1 repetitive element;
2484	12359	22252	3.03	2.0E-64	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
2484	12359	22253	3.03	2.0E-64	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
3101	13027	22823	2.56	2.0E-64	4504058	NT	Homo sapiens glutamic-oxalacetic transaminase 2, mitochondrial (aspartate aminotransferase 2) (GOT2), nuclear gene encoding mitochondrial protein, mRNA
3719	13631	23416	1.33	2.0E-64	AW958145.1	EST_HUMAN	EST370215 IMAGE resequences, IMAGE Homo sapiens cDNA
3719	13631	23417	1.33	2.0E-64	AW958145.1	EST_HUMAN	EST370215 IMAGE resequences, IMAGE Homo sapiens cDNA
5653	15565	25662	2.62	2.0E-64	AU124387.1	EST_HUMAN	AU124387 NT2RM2 Homo sapiens cDNA clone NT2RM2002113 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5783	15689	25799	1.3	2.0E-64	AF113708.1	NT	Homo sapiens angiotensin 4 (ANG4) mRNA, partial cds
5906	15812	25938	4.97	2.0E-64	BF668537.1	EST_HUMAN	602123474F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4280395 5'
5976	15880	26004	1.31	2.0E-64	A078387.1	EST_HUMAN	oz29b03.x1 Soares_total_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:1676717 3'
6024	15928	26060	3.86	2.0E-64	M77185.1	NT	H. sapiens dopamine receptor D5 pseudogene 1, partial cds
8144	18032	28279	2.85	2.0E-64	BF528114.1	EST_HUMAN	602042882F1 NCI_CGAP_Brn67 Homo sapiens cDNA clone IMAGE:4180556 5'
8406	18282	28534	6.4	2.0E-64	A922911.1	EST_HUMAN	wn81b06.x1 NCI_CGAP_Ut1 Homo sapiens cDNA clone IMAGE:2452211 3'
8406	18282	28535	6.4	2.0E-64	A922911.1	EST_HUMAN	wn81b06.x1 NCI_CGAP_Ut1 Homo sapiens cDNA clone IMAGE:2452211 3'
9182	18921	25347	1.73	2.0E-64	8567387	NT	Homo sapiens period (Drosophila) homolog 3 (PER3), mRNA
9617	19195		2.89	2.0E-64	H55192.1	EST_HUMAN	CHR220101 Chromosome 22 exon Homo sapiens cDNA clone C22_132 5'
258	10224	20039	1.74	1.0E-64	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
1740	11641	21508	5.88	1.0E-64	A929419.1	EST_HUMAN	au60c01.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2519136 3' similar to gb:121696.cds1 PROTHYMOSIN ALPHA (HUMAN); contains element MSR1 repetitive element;
3466	13382	23188	5.61	1.0E-64	AF198779.1	NT	Homo sapiens transcription factor 1GHM enhancer 3, JM11 protein, JM4 protein, JM5 protein, T54 protein, JM10 protein, A4 differentiation-dependent protein, triple LIM domain protein 6, and synaptophysin genes, complete cds, and L-type calcium channel a>
3536	13452	23248	1.32	1.0E-64	AF228527.1	NT	Homo sapiens TRIAD3 mRNA, partial cds
3536	13452	23249	1.32	1.0E-64	AF228527.1	NT	Homo sapiens TRIAD3 mRNA, partial cds
9154	18904		1.62	1.0E-64	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
2230	12115	22017	0.93	9.0E-65	X89211.1	NT	H. sapiens DNA for endogenous retroviral like element
2230	12115	22018	0.93	9.0E-65	X89211.1	NT	H. sapiens DNA for endogenous retroviral like element
8822	18635		15.1	9.0E-65	BF330676.1	EST_HUMAN	QV4-BT0257-081199-017-e03 BT0257 Homo sapiens cDNA
8799	18613	28903	10.93	8.0E-65	A929244.1	EST_HUMAN	au58h07.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2519005 3' similar to SW:RL21_HUMAN P46778 60S RIBOSOMAL PROTEIN L21.;
7841	17691	27936	2.05	7.0E-65	BE081653.1	EST_HUMAN	QV2-BT0635-240400-162-c02 BT0635 Homo sapiens cDNA
1040	10958	20801	1.52	6.0E-65	AV721898.1	EST_HUMAN	AV721898 HTB Homo sapiens cDNA clone HTBBZC06 5'
1880	11776		8.32	6.0E-65	AA550929.1	EST_HUMAN	nj86df10.s1 NCI_CGAP_Prl11 Homo sapiens cDNA clone IMAGE:399379 similar to gb:K03002 60S RIBOSOMAL PROTEIN L32 (HUMAN);
7080	16957	27150	2.52	6.0E-65	AW083252.1	EST_HUMAN	xc07b09.x1 NCI_CGAP_Co21 Homo sapiens cDNA clone IMAGE:2583545 3' similar to TR:Q63306 Q63306 LONG INTERSPERSED REPETITIVE DNA CONTAINING 7 ORFS. ; contains L1,b2 L1 repetitive element ;
7209	17086	27275	4.25	6.0E-65	AA427878.1	EST_HUMAN	zw53b06.s1 Soares_total_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:773747 3'
7209	17086	27276	4.25	6.0E-65	AA427878.1	EST_HUMAN	zw53b06.s1 Soares_total_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:773747 3'
8247	18127	28375	6.18	6.0E-65	BE567816.1	EST_HUMAN	601340485F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3682677 5'
8787	18602	28892	4.76	6.0E-65	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
615	10551	20362	0.91	5.0E-65	AF064604.1	NT	Homo sapiens KE03 protein mRNA, partial cds
1331	11238	21094	1.62	5.0E-65	7661951	NT	Homo sapiens KIAA0156 gene product (KIAA0156), mRNA
1331	11238	21095	1.62	5.0E-65	7661951	NT	Homo sapiens KIAA0156 gene product (KIAA0156), mRNA
2110	11999	21898	1.02	5.0E-65	AB033768.1	NT	Homo sapiens hPAD-colony10 mRNA for peptidylarginine deiminase type I, complete cds
3217	13141	22944	1.91	5.0E-65	4507848	NT	Homo sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13), mRNA
3217	13141	22945	1.91	5.0E-65	4507848	NT	Homo sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13), mRNA
186	10158	19975	1.09	4.0E-65	AL120419.1	EST_HUMAN	DKFZp761G108_r1 761 (synonym: hamy2) Homo sapiens cDNA clone DKFZp761G108.5'
728	10660	20491	1.56	4.0E-65	AI268468.1	EST_HUMAN	qm46a01.x1 Soares_placenta_8to9weeks_2NbHP8to9W Homo sapiens cDNA clone IMAGE:1891800 3'
728	10660	20492	1.56	4.0E-65	AI268468.1	EST_HUMAN	qm46a01.x1 Soares_placenta_8to9weeks_2NbHP8to9W Homo sapiens cDNA clone IMAGE:1891800 3'
1062	10978	20822	1.88	4.0E-65	4826735	NT	Homo sapiens fragile X mental retardation, autosomal homolog 1 (FXR1), mRNA
1470	11375	21240	8.28	4.0E-65	4506636	NT	Homo sapiens ribosomal protein L34 (RPL34), mRNA
2288	12171	22069	1.03	4.0E-65	BE221469.1	EST_HUMAN	hu25a04.x1 NCI_CGAP_Mel15 Homo sapiens cDNA clone IMAGE:3171102 3'
2288	12171	22069	1.03	4.0E-65	BE221469.1	EST_HUMAN	hu25a04.x1 NCI_CGAP_Mel15 Homo sapiens cDNA clone IMAGE:3171102 3'
5138	15005	24775	0.95	4.0E-65	9055269	NT	Homo sapiens low density lipoprotein receptor related protein-deleted in tumor (LRPDI), mRNA
5138	15005	24776	0.95	4.0E-65	9055269	NT	Homo sapiens low density lipoprotein receptor related protein-deleted in tumor (LRPDI), mRNA
5740	15648	25754	3.93	4.0E-65	AB033093.1	NT	Homo sapiens mRNA for KIAA1267 protein, partial cds
5740	15648	25755	3.93	4.0E-65	AB033093.1	NT	Homo sapiens mRNA for KIAA1267 protein, partial cds
6285	16149	26304	2.29	4.0E-65	11545780	NT	Homo sapiens hypothetical protein FLJ22087 (FLJ22087), mRNA
8020	17870		2.17	4.0E-65	AJ277546.2	NT	Homo sapiens WEE1 gene for protein kinase and partial ZNF143 gene for zinc finger transcription factor
8446	18320	28579	7.47	4.0E-65	AF119846.1	NT	Homo sapiens PRO1474 mRNA, complete cds
9471	10978	20822	1.34	4.0E-65	4826735	NT	Homo sapiens fragile X mental retardation, autosomal homolog 1 (FXR1), mRNA
9975	19434	25152	1.58	4.0E-65	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
1212	12646		5.37	3.0E-65	X78932.1	NT	H. sapiens HZF9 mRNA for zinc finger protein
1780	11679	21557	1.14	3.0E-65	AJ000592.1	EST_HUMAN	ov23f03.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1638173 3' similar to contains element MSR1 repetitive element;
3239	13162	22962	1.39	3.0E-65	4504950	NT	Homo sapiens laminin, beta 1 (LAMB1), mRNA
3660	13574	23361	0.98	3.0E-65	AJ000592.1	EST_HUMAN	ov23f03.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1638173 3' similar to contains element MSR1 repetitive element;
4551	14444	24228	1.41	3.0E-65	6912365	NT	Homo sapiens rab6 GTPase activating protein (GAP and centrosome-associated) (GAPCENA), mRNA
7793	17643	27876	1.43	3.0E-65	BE787366.1	EST_HUMAN	601479686F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3892405 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8693	17877	28119	9.69	3.0E-65	AA430006.1	EST_HUMAN	zw65a06.t1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:781042 5'
3368	13277	23078	5.27	2.0E-65	BF680294.1	EST_HUMAN	602155062F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4295966 5'
5938	15843		4.55	2.0E-65	BE263373.1	EST_HUMAN	601190883F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3634741 5'
6233	16099	26247	23.12	2.0E-65	BF576922.1	EST_HUMAN	602134359F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4289295 5'
7133	17010	27202	1.27	2.0E-65	AK024463.1	NT	Homo sapiens mRNA for FLJ00056 protein, partial cds
7133	17010	27203	1.27	2.0E-65	AK024463.1	NT	Homo sapiens mRNA for FLJ00056 protein, partial cds
8048	17939	28189	2.85	2.0E-65	11419247	NT	Homo sapiens SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily d, member 3 (SMARCD3), mRNA
9109	18874		4.15	2.0E-65	AA307904.1	EST_HUMAN	EST178755 Colon carcinoma (HCC) cell line Homo sapiens cDNA 5' end similar to similar to endogenous retrovirus
9580	19504		2.37	2.0E-65	BF246086.1	EST_HUMAN	601854033F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4073769 5'
85	10069		1.06	1.0E-65	BF125544.1	EST_HUMAN	601763488F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:4026501 5'
528	10470	20282	1.32	1.0E-65	7657495	NT	Homo sapiens putative Rab5 GDP/GTP exchange factor homologue (RABEX5), mRNA
1994	11688	21781	0.91	1.0E-65	AB040946.1	NT	Homo sapiens mRNA for KIAA1513 protein, partial cds
3326	13246	23052	0.89	1.0E-65	BE466681.1	EST_HUMAN	hz24a09.x1 NCL_CGAP_G08 Homo sapiens cDNA clone IMAGE:3208888 5'
3917	13826	23606	2.13	1.0E-65	4504082	NT	Homo sapiens glycican 4 (GPC4) mRNA
3917	13826	23607	2.13	1.0E-65	4504082	NT	Homo sapiens glycican 4 (GPC4) mRNA
4112	14012	23789	2.37	1.0E-65	AW029340.1	EST_HUMAN	wx09c09.x1 NCL_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2543152 3'
4112	14012	23790	2.37	1.0E-65	AW029340.1	EST_HUMAN	wx09c09.x1 NCL_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2543152 3'
6802	16681	26870	1.58	1.0E-65	AW820481.1	EST_HUMAN	QV2-ST0298-140200-042-f12 ST0298 Homo sapiens cDNA
6802	16681	26871	1.58	1.0E-65	AW820481.1	EST_HUMAN	QV2-ST0298-140200-042-f12 ST0298 Homo sapiens cDNA
6842	16721	26914	2.38	1.0E-65	AU141295.1	EST_HUMAN	AU141295 THYRO1 Homo sapiens cDNA clone THYRO1000356 5'
6842	16721	26915	2.38	1.0E-65	AU141295.1	EST_HUMAN	AU141295 THYRO1 Homo sapiens cDNA clone THYRO1000356 5'
7132	17009	27201	1.76	1.0E-65	BF698707.1	EST_HUMAN	602126239F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4283313 5'
7215	17092	27282	1.62	1.0E-65	AU129040.1	EST_HUMAN	AU129040 NT2RP2 Homo sapiens cDNA clone NT2RP2004714 5'
7215	17092	27283	1.62	1.0E-65	AU129040.1	EST_HUMAN	AU129040 NT2RP2 Homo sapiens cDNA clone NT2RP2004714 5'
7222	17099		2.83	1.0E-65	11431994	NT	Homo sapiens inositol 1,4,5-trisphosphate receptor, type 1 (ITPR1), mRNA
7456	17265	27459	6	1.0E-65	AI191716.1	EST_HUMAN	qds6a02.x1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1733450 3' similar to gb:M29581 ZINC FINGER PROTEIN 8 (HUMAN); contains MER19.t1 MER19 repetitive element;
7687	17537	27763	1.25	1.0E-65	AU153793.1	EST_HUMAN	AU153793 NT2RP3 Homo sapiens cDNA clone NT2RP3004016 3'
8042	17933	28181	2.23	1.0E-65	M26167.1	NT	Human platelet factor 4 variation 1 (PF4var1) gene, complete cds
8158	18046	28298	12.99	1.0E-65	4506660	NT	Homo sapiens ribosomal protein L7a (RPL7A) mRNA
8473	18346	28610	2.18	1.0E-65	BF698707.1	EST_HUMAN	602126239F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4283313 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8542	18414	28681	2.35	1.0E-65	AI621017.1	EST_HUMAN	ts76a06.x1 NCL_CGAP_GC6 Homo sapiens cDNA clone IMAGE:2237170 3' similar to gb.L15533_maf
9185	18905		2.27	1.0E-65	11418041	NT	PANCREATITIS ASSOCIATED PROTEIN 1 PRECURSOR (HUMAN);
9254	18963	25318	4.85	1.0E-65	11418322	NT	Homo sapiens TNF-inducible protein CG12-1 (CG12-1), mRNA
9665	19225		1.44	1.0E-65	11418248	NT	Homo sapiens cadherin EGF LAG seven-pass G-type receptor 1 (CELSR1), mRNA
65	10051	19864	1.51	9.0E-66	AL160311.1	NT	Homo sapiens sulfotransferase-related protein (SULTX3), mRNA
65	10051	19865	1.51	9.0E-66	AL160311.1	NT	Novel human gene mapping to chromosome 22
1332	11239	21096	2.49	9.0E-66	5031980	NT	Novel human gene mapping to chromosome 22
1332	11239	21097	2.49	9.0E-66	5031980	NT	Homo sapiens 26S proteasome-associated pad1 homolog (POH1) mRNA
1468	11373		4.18	9.0E-66	M87299.1	NT	Homo sapiens 26S proteasome-associated pad1 homolog (POH1) mRNA
3826	13738	23529	0.9	9.0E-66	M72393.1	NT	Human transposon-like element, partial
3826	13738	23530	0.9	9.0E-66	M72393.1	NT	Human calcium-dependent phospholipid-binding protein (PLA2) mRNA, complete cds
4591	14479	24266	0.88	8.0E-66	AA424304.1	EST_HUMAN	Human calcium-dependent phospholipid-binding protein (PLA2) mRNA, complete cds
8654	18543		1.73	7.0E-66	BE054410.1	EST_HUMAN	z60c05.r1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:767048 5'
4269	14168	23944	1.22	6.0E-66	AI924653.1	EST_HUMAN	RC4-BT0311-141199-011-h06 BT0311 Homo sapiens cDNA
4269	14168	23945	1.22	6.0E-66	AI924653.1	EST_HUMAN	wn57h07.x1 NCL_CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2449597 3' similar to WP.F15G9.4A
4269	14168	23946	1.22	6.0E-66	AI924653.1	EST_HUMAN	CE18595;
8489	18372	28636	7.07	6.0E-66	X69181.1	NT	wn57h07.x1 NCL_CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2449597 3' similar to WP.F15G9.4A
1344	11250	21107	2.25	5.0E-66	BE064410.1	EST_HUMAN	CE18595;
7357	17225	27424	12.31	5.0E-66	11420557	NT	wn57h07.x1 NCL_CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2449597 3' similar to WP.F15G9.4A
773	10703	20542	0.79	4.0E-66	6079816	NT	H. sapiens mRNA for ribosomal protein L31
2235	12120	22022	1.94	4.0E-66	X89211.1	NT	RC4-BT0311-141199-011-h06 BT0311 Homo sapiens cDNA
2425	12302		3.66	4.0E-66	AJ223364.1	NT	Homo sapiens thyroid hormone receptor binding protein (AIB3), mRNA
4674	14560		5.15	4.0E-66	9635487	NT	Mus musculus fragile X mental retardation syndrome 1 homolog (Fmr1), mRNA
5407	15326	25376	3.35	4.0E-66	11428843	NT	H. sapiens DNA for endogenous retroviral like element
5512	15430	25494	1.78	4.0E-66	AW939119.1	EST_HUMAN	Homo sapiens germ-line DNA upstream of Jkappa locus
6096	15106	24869	4.71	4.0E-66	AW935473.1	EST_HUMAN	Homo endogenous retrovirus, complete genome
6232	16098	26246	6.89	4.0E-66	U78168.1	NT	Homo sapiens methylene tetrahydrofolate dehydrogenase (NAD+ dependent), methenyltetrahydrofolate
6708	16588	26776	6.38	4.0E-66	11421638	NT	cyclohydrolase (MTH-FD2), mRNA
							GV1-DT0069-110200-067-g10 DT0069 Homo sapiens cDNA
							EST377546 IMAGE resequences, MAGI Homo sapiens cDNA
							Homo sapiens cAMP-regulated guanine nucleotide exchange factor I (cAMP-GEFI) mRNA, complete cds
							Homo sapiens hypothetical protein FLJ20116 (FLJ20116), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8052	17943	28193	1.96	4.0E-66	BF507493.1	EST_HUMAN	UI-H-BW1-amr-a-10-0-UJ.st NCI CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3070747 3'
1408	11313	21175	24.62	3.0E-66	4502098	NT	Homo sapiens solute carrier family 25 (mitochondrial carrier, adenine nucleotide translocator), member 5 (SLC25A5), nuclear gene encoding mitochondrial protein, mRNA
1408	11313	21176	24.62	3.0E-66	4502098	NT	Homo sapiens solute carrier family 25 (mitochondrial carrier, adenine nucleotide translocator), member 5 (SLC25A5), nuclear gene encoding mitochondrial protein, mRNA
1939	11834	21717	0.84	3.0E-66	N55323.1	EST_HUMAN	y27g12.1 Soares_multiple_sclerosis_2NbhMSP Homo sapiens cDNA clone IMAGE:284326 5' similar to SW/H2B1_TIGCA P35068 HISTONE H2B.1/H2B.2. [2] PIR:B56612;
1939	11834	21718	0.84	3.0E-66	N55323.1	EST_HUMAN	y27g12.1 Soares_multiple_sclerosis_2NbhMSP Homo sapiens cDNA clone IMAGE:284326 5' similar to SW/H2B1_TIGCA P35068 HISTONE H2B.1/H2B.2. [2] PIR:B56612;
1939	11834	21719	0.84	3.0E-66	N55323.1	EST_HUMAN	y27g12.1 Soares_multiple_sclerosis_2NbhMSP Homo sapiens cDNA clone IMAGE:284326 5' similar to SW/H2B1_TIGCA P35068 HISTONE H2B.1/H2B.2. [2] PIR:B56612;
2675	12540	22430	2.91	3.0E-66	11141880	NT	Homo sapiens TGF(beta)-induced transcription factor 2 (TGIF2), mRNA
3079	13005	22797	5.47	3.0E-66	7662223	NT	Homo sapiens KIAA0649 gene product (KIAA0649), mRNA
5528	15445	25511	1.64	3.0E-66	11417945	NT	Homo sapiens NIPSNAP, C. elegans, homolog 1 (NIPSNAP1), mRNA
5528	15445	25512	1.64	3.0E-66	11417945	NT	Homo sapiens NIPSNAP, C. elegans, homolog 1 (NIPSNAP1), mRNA
8800	18614	28904	8.3	3.0E-66	5453949	NT	Homo sapiens protein phosphatase 2, regulatory subunit B (B55), alpha isoform (PPP2R5A), mRNA
45	10033	19837	1.02	2.0E-66	7657334	NT	Homo sapiens Missshapen/NIK-related kinase (MINK), mRNA
45	10033	19838	1.02	2.0E-66	7657334	NT	Homo sapiens Missshapen/NIK-related kinase (MINK), mRNA
416	9983	19774	0.93	2.0E-66	4505524	NT	Homo sapiens origin recognition complex, subunit 5 (yeast homolog)-like (ORC5L), mRNA, and translated products
416	9983	19775	0.93	2.0E-66	4505524	NT	Homo sapiens origin recognition complex, subunit 5 (yeast homolog)-like (ORC5L), mRNA, and translated products
1784	11682	21560	2.02	2.0E-66	AL163301.2	NT	Homo sapiens chromosome 21 segment HS21C101
2944	12871	22669	0.95	2.0E-66	X65859.1	NT	H. sapiens pseudogene for the low affinity IL-8 receptor
3975	13882	23657	0.86	2.0E-66	AF108389.1	NT	Homo sapiens sodium/calcium exchanger isoform NaCa3 (NCX1), mRNA, complete cds
4556	14448	24233	12.69	2.0E-66	AJ133267.2	NT	Homo sapiens HLA-B gene for human leukocyte antigen B
4556	14448	24234	12.69	2.0E-66	AJ133267.2	NT	Homo sapiens HLA-B gene for human leukocyte antigen B
7135	17012	27205	2.16	2.0E-66	N45480.1	EST_HUMAN	y59c02.1 Soares_multiple_sclerosis_2NbhMSP Homo sapiens cDNA clone IMAGE:277826 5'
9475	19712		2.22	2.0E-66	11418318	NT	Homo sapiens G-2 and S-phase expressed 1 (GTSE1), mRNA
2864	12792	22586	1.38	1.0E-66	AV717817.1	EST_HUMAN	AV717817 DCB Homo sapiens cDNA clone DCBADC07 5'
2864	12792	22586	1.38	1.0E-66	AV717817.1	EST_HUMAN	AV717817 DCB Homo sapiens cDNA clone DCBADC07 5'
4288	12792	22585	3.26	1.0E-66	AV717817.1	EST_HUMAN	AV717817 DCB Homo sapiens cDNA clone DCBADC07 5'
4288	12792	22586	3.26	1.0E-66	AV717817.1	EST_HUMAN	AV717817 DCB Homo sapiens cDNA clone DCBADC07 5'

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5306	15227	25031	5.36	1.0E-66	BF673088.1	EST_HUMAN	602152996F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4294151 5'
6143	15991	28126	1.49	1.0E-66	BF328623.1	EST_HUMAN	RC5-BN0193-010900-034-G06 BN0193 Homo sapiens cDNA
6926	16804	28998	1.37	1.0E-66	AA663858.1	EST_HUMAN	aa80804.s1 NCI CGAP_GCB1 Homo sapiens cDNA clone IMAGE:827262 3'
8312	18189	28438	2.39	1.0E-66	AF111167.2	NT	Homo sapiens Jun dimerization protein gene, partial cds; cfos gene, complete cds; and unknown gene
9260	18965		2.09	9.0E-67	11418177	NT	Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA
4829	14711		0.84	8.0E-67	M79158.1	EST_HUMAN	EST01750 Subtracted Hippocampus, Striatum (cat. #936205) Homo sapiens cDNA clone HHCPN31 similar to L1 repetitive element
376	10360	20184	6.19	7.0E-67	AW162232.1	EST_HUMAN	au75402.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2782083 3' similar to gb:M37104 ATP SYNTHASE COUPLING FACTOR 6, MITOCHONDRIAL PRECURSOR (HUMAN);
1360	11266	21122	2.63	7.0E-67	AA383416.1	EST_HUMAN	EST96812 Testis 1 Homo sapiens cDNA 5' end similar to similar to C. elegans hypothetical protein, cosmid ZK353
1535	11439	21296	1	7.0E-67	W85947.1	EST_HUMAN	zh56505.r1 Soares_fetal_liver_spleen_1INFLS_S1 Homo sapiens cDNA clone IMAGE:416049 5'
1536	11439	21297	1	7.0E-67	W85947.1	EST_HUMAN	zh56505.r1 Soares_fetal_liver_spleen_1INFLS_S1 Homo sapiens cDNA clone IMAGE:416049 5'
1988	11881	21773	1.06	7.0E-67	7657243	NT	Homo sapiens inositol 1,3,4-trisphosphate 5/6 kinase (ITPK1), mRNA
1988	11881	21774	1.06	7.0E-67	7657243	NT	Homo sapiens inositol 1,3,4-trisphosphate 5/6 kinase (ITPK1), mRNA
2779	10360	20184	7.07	7.0E-67	AW162232.1	EST_HUMAN	au75402.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2782083 3' similar to gb:M37104 ATP SYNTHASE COUPLING FACTOR 6, MITOCHONDRIAL PRECURSOR (HUMAN);
5793	15699	25807	2.04	7.0E-67	11428572	NT	Homo sapiens adaptor-related protein complex 2, beta 1 subunit (AP2B1), mRNA
5793	15699	25808	2.04	7.0E-67	11428572	NT	Homo sapiens adaptor-related protein complex 2, beta 1 subunit (AP2B1), mRNA
9039	18826	29111	1.56	7.0E-67	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
9039	18826	29112	1.56	7.0E-67	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
9501	19116	25292	3.33	7.0E-67	AB011399.1	NT	Homo sapiens gene for AF-6, complete cds
9668	19357		1.43	7.0E-67	11421527	NT	Homo sapiens calcium channel, voltage-dependent, alpha 2/delta subunit 1 (CACNA2D1), mRNA
547	10488	20297	1.32	6.0E-67	X88988.1	NT	H. sapiens mRNA for acetyl-CoA carboxylase
778	10708	20547	1.5	6.0E-67	Z17227.1	NT	Homo sapiens mRNA for transmembrane receptor protein
1252	11159	21008	0.93	6.0E-67	Y14320.1	NT	Homo sapiens PMF69 gene, exons 3, 4, 5, 6 & 7
3131	13056	22856	1.24	6.0E-67	4506434	NT	Homo sapiens retinoblastoma 1 (including osteosarcoma) (RB1) mRNA
3391	13308	23106	1.2	6.0E-67	4507332	NT	Homo sapiens Synapsin III (SYN3) mRNA, and translated products
3391	13308	23107	1.2	6.0E-67	4507332	NT	Homo sapiens Synapsin III (SYN3) mRNA, and translated products
4035	13938	23714	1.28	6.0E-67	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
4035	13938	23715	1.28	6.0E-67	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
4607	14495	24283	3.37	6.0E-67	7657020	NT	Homo sapiens DKFZp434P211 protein (DKFZP434P211), mRNA
4607	14495	24284	3.37	6.0E-67	7657020	NT	Homo sapiens DKFZp434P211 protein (DKFZP434P211), mRNA

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Table 4
Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5125	14761		2.1	6.0E-67	4507848	NT	Homo sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13) mRNA
3184	13109	22913	2.45	5.0E-67	AF009860.1	NT	Homo sapiens T cell receptor beta locus, TCRBV7S3A2 to TCRBV12S2 region
8352	18229		2.1	5.0E-67	BE010038.1	EST_HUMAN	PM3-BN0176-100400-001-g04 BN0176 Homo sapiens cDNA
1306	11213	21069	1.83	4.0E-67	R90819.1	EST_HUMAN	Yn02d1.1.r1 Scores adult brain N2b4HB55Y Homo sapiens cDNA clone IMAGE:167253 5'
6853	16762		1.22	4.0E-67	BF357321.1	EST_HUMAN	RCO-HT0934-150900-026-c03 HT0934 Homo sapiens cDNA
8416	18290		2.3	4.0E-67	AA714294.1	EST_HUMAN	nm06e01.s1 NCL_CGAP_SS1 Homo sapiens cDNA clone IMAGE:1238472 3' similar to TR:O10385 O10385
2782	10553	20365	0.93	3.0E-67	AA333768.1	EST_HUMAN	PRO-POL-DUTPASE POLYPROTEIN ;
3407	13324	23125	1.14	3.0E-67	BE064410.1	EST_HUMAN	EST37903 Embryo, 9 week Homo sapiens cDNA 5' end
4596	14484	24270	3.14	3.0E-67	AW869159.1	EST_HUMAN	RC4-BT0311-141199-011-h06 BT0311 Homo sapiens cDNA
6760	16639	26827	1.22	3.0E-67	BF196068.1	EST_HUMAN	MR3-SN0066-040500-008-f01 SN0066 Homo sapiens cDNA
8553	18451		19.27	3.0E-67	AA927874.1	EST_HUMAN	hr8105.x1 NCL_CGAP Kid11 Homo sapiens cDNA clone IMAGE:3134913 3' similar to SW:RHOP_MOUSE
180	10152	19967	1.94	2.0E-67	BE348354.1	EST_HUMAN	Q61085 GTP-RHO BINDING PROTEIN 1 ;
827	10754	20604	6	2.0E-67	AW816405.1	EST_HUMAN	om18b07.s1 Scores_NFL_I_GEG_S1 Homo sapiens cDNA clone IMAGE:1541365 3'
1089	11005		1.74	2.0E-67	AF167460.1	NT	hw16g09.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3183136 3' similar to WP:F23H11.9
1841	11737	21614	1.5	2.0E-67	BE303037.1	EST_HUMAN	CE09617 ;
1841	11737	21615	1.5	2.0E-67	BE303037.1	EST_HUMAN	QV4-ST0234-181199-037-f05 ST0234 Homo sapiens cDNA
2336	12216	22116	0.98	2.0E-67	AF309861.1	NT	Homo sapiens double stranded RNA activated protein kinase (PKR) gene, exons 2a, 2, 3, and 4
2381	12261	22153	1.2	2.0E-67	4758795	NT	ba72g05.y1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2905976 5' similar to TR:O94892 O94892
3422	13339	23144	3.9	2.0E-67	AA625755.1	EST_HUMAN	KIAA0798 PROTEIN ;
3921	13830	23610	2.33	2.0E-67	AL163300.2	NT	Homo sapiens KRAB zinc finger protein ZFQR mRNA, complete cds
5724	15631	25734	4.22	2.0E-67	BF240758.1	EST_HUMAN	Homo sapiens developmentally regulated GTP-binding protein 1 (DRG1) mRNA
5803	15708	25820	2.17	2.0E-67	AB051763.1	NT	zu91g01.s1 Scores_testis_NHT Homo sapiens cDNA clone IMAGE:745392 3'
5803	15708	25821	2.17	2.0E-67	AB051763.1	NT	Homo sapiens chromosome 21 segment HS21C100
7202	17079	27264	1.34	2.0E-67	AW602635.1	EST_HUMAN	601875351F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4091893 5'
7202	17079	27265	1.34	2.0E-67	AW602635.1	EST_HUMAN	Homo sapiens mRNA for NADPH-cytochrome P-450 reductase, complete cds
8409	19769		3.26	2.0E-67	11436448	NT	Homo sapiens mRNA for NADPH-cytochrome P-450 reductase, complete cds
8558	18428	28698	1.77	2.0E-67	BE295714.1	EST_HUMAN	RC4-BT0566-170100-011-c07 BT0566 Homo sapiens cDNA
8751	17800	28144	2.26	2.0E-67	BF377169.1	EST_HUMAN	RC4-BT0566-170100-011-c07 BT0566 Homo sapiens cDNA
9388	19577	25069	2.6	2.0E-67	11418189	NT	Homo sapiens KIAA0985 protein (KIAA0985), mRNA
							60175762F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3531038 5'
							PM2-TN0103-040900-001-c02 TN0103 Homo sapiens cDNA
							Homo sapiens thyroid autoantigen 70kD (Ku antigen) (G22P1), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
253	10219	20036	4.37	1.0E-67	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
2129	12017	21915	2.46	8.0E-68	BE870732.1	EST_HUMAN	601448558F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3862254 5'
3794	13706	23492	4.96	8.0E-68	AA209456.1	EST_HUMAN	zq82h10.r1 Stratagene hNT neuron (#937233) Homo sapiens cDNA clone IMAGE:648163 5' similar to SW.SAV_SULAC Q07590 SAV PROTEIN.;
3794	13706	23493	4.96	8.0E-68	AA209456.1	EST_HUMAN	zq82h10.r1 Stratagene hNT neuron (#937233) Homo sapiens cDNA clone IMAGE:648163 5' similar to SW.SAV_SULAC Q07590 SAV PROTEIN.;
1849	11745		2.2	6.0E-68	AW503842.1	EST_HUMAN	U1HF-BN0-alb-c-07-Q-U1.r1 NIH_MGC_60 Homo sapiens cDNA clone IMAGE:3078924 5'
7971	17821	28064	2.46	6.0E-68	11422086	NT	Homo sapiens brefeldin A-inhibited guanine nucleotide-exchange protein 2 (BIG2), mRNA
8489	18362	28627	1.93	6.0E-68	AF133901.1	NT	Homo sapiens killer inhibitory receptor 2-2-1 (KIR221) and killer inhibitory receptor 2-2-2 (KIR222) genes, partial cds
9676	19234		1.42	6.0E-68	BE612554.1	EST_HUMAN	601452067F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3865761 5'
9918	19391	25178	1.36	6.0E-68	BF310675.1	EST_HUMAN	601894635F2 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4124144 5'
785	12642	20555	0.87	5.0E-68	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
785	12642	20556	0.87	5.0E-68	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
802	10731	20572	3.87	5.0E-68	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
802	10731	20573	3.87	5.0E-68	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
3108	13034	22830	2.62	5.0E-68	AB037852.1	NT	Homo sapiens mRNA for KIAA1431 protein, partial cds
2480	12356	22247	1.01	4.0E-68	11421388	NT	Homo sapiens transcription factor NRF (NRF), mRNA
2480	12356	22248	1.01	4.0E-68	11421388	NT	Homo sapiens transcription factor NRF (NRF), mRNA
4900	14780		17.24	4.0E-68	P04406	SWISSPROT	GLYCERALDEHYDE 3-PHOSPHATE DEHYDROGENASE, LIVER
6061	16044	26188	5.64	4.0E-68	11055991	NT	Homo sapiens serine carboxypeptidase 1 precursor protein (HSCP1), mRNA
6061	16044	26189	5.64	4.0E-68	11055991	NT	Homo sapiens serine carboxypeptidase 1 precursor protein (HSCP1), mRNA
7225	17102	27290	5.41	4.0E-68	D63479.2	NT	Homo sapiens mRNA for KIAA0145 protein, partial cds
7225	17102	27291	5.41	4.0E-68	D63479.2	NT	Homo sapiens mRNA for KIAA0145 protein, partial cds
7295	17171	27371	2.39	4.0E-68	AB040918.1	NT	Homo sapiens mRNA for KIAA1485 protein, partial cds
3611	13525	23312	5.61	3.0E-68	AF236082.1	NT	Mus musculus G-protein coupled receptor GPR73 (Gpr73) mRNA, complete cds
7441	16454		4.44	3.0E-68	AI342323.1	EST_HUMAN	q38h02.x1 Soares, fetal_lung, NbrL19W Homo sapiens cDNA clone IMAGE:1950291 3' similar to contains THR.12 THR repetitive element.;
7997	17847	28088	1.45	3.0E-68	F28784.1	EST_HUMAN	HSPD18178 HM3 Homo sapiens cDNA clone s3000023D09
9872	19502		1.53	3.0E-68	AW939485.1	EST_HUMAN	QV1-DT0072-010200-056-h06 DT0072 Homo sapiens cDNA
2832	15076		12.26	2.0E-68	D00522.1	NT	Cricetus longicaudatus mRNA for EF-1 alpha, complete cds
4583	14473	24261	1.66	2.0E-68	AB008881.1	NT	Homo sapiens gene for activin receptor type IIB, complete cds
6110	16004		8	2.0E-68	R45088.1	EST_HUMAN	y938g04.s1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:34896 3'

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6202	15962	26095	4.79	2.0E-68	BF035316.1	EST_HUMAN	601455514F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3862034 5'
9148	19731		1.92	2.0E-68	BE897376.1	EST_HUMAN	601437367F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3922192 5'
72	10056	19873	1.31	1.0E-68	4506222	NT	Homo sapiens meningioma (disrupted in balanced translocation) 1 (MN1), mRNA
293	10257	20078	9.36	1.0E-68	AW816405.1	EST_HUMAN	QV4-ST0234-181199-037-05 ST0234 Homo sapiens cDNA
2205	12092	21994	1.32	1.0E-68	AB011149.1	NT	Homo sapiens mRNA for KIAA0577 protein, complete cds
2205	12092	21995	1.32	1.0E-68	AB011149.1	NT	Homo sapiens mRNA for KIAA0577 protein, complete cds
2728	12590	22486	1.01	1.0E-68	AW451832.1	EST_HUMAN	UJ-H-BI3-alk-f-01-UJ.s1 NCI_CGAP_Sub6 Homo sapiens cDNA clone IMAGE:2737272 3'
3928	13837	23617	0.95	1.0E-68	BE295032.1	EST_HUMAN	601177002F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3532344 5'
4954	14831	24598	0.98	1.0E-68	AA897343.1	EST_HUMAN	al47g12.s1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1460518 3'
5261	15183	24959	1.57	1.0E-68	7662349	NT	Homo sapiens cell recognition molecule Caspr2 (KIAA0868), mRNA
8226	18108	28361	2.44	1.0E-68	11418869	NT	Homo sapiens phosphodiesterase 7B (PDE7B), mRNA
8226	18108	28362	2.44	1.0E-68	11418869	NT	Homo sapiens phosphodiesterase 7B (PDE7B), mRNA
8275	18155	28396	2.29	1.0E-68	L76416.1	NT	Homo sapiens MIF2 suppressor (HSMIT3) mRNA, complete cds
9659	10056	19873	1.95	1.0E-68	4505222	NT	Homo sapiens meningioma (disrupted in balanced translocation) 1 (MN1), mRNA
9662	19669	24991	1.38	1.0E-68	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
19	10006	19797	1.82	9.0E-69	5031976	NT	Homo sapiens pre-B-cell colony-enhancing factor (PBEF) mRNA
19	10006	19798	1.82	9.0E-69	5031976	NT	Homo sapiens pre-B-cell colony-enhancing factor (PBEF) mRNA
1011	10929	20772	1.63	9.0E-69	5031980	NT	Homo sapiens 26S proteasome-associated pad1 homolog (POH1) mRNA
1011	10929	20773	1.63	9.0E-69	5031980	NT	Homo sapiens 26S proteasome-associated pad1 homolog (POH1) mRNA
4037	13940	23718	0.78	9.0E-69	4757867	NT	Homo sapiens v-rat murine sarcoma viral oncogene homolog B1 (BRAF) mRNA
8263	18143		9.27	9.0E-69	AU117241.1	EST_HUMAN	AU117241 HEMBA1 Homo sapiens cDNA clone HEMBA1000968 5'
3340	13260		1.21	8.0E-69	AJ237744.1	NT	Homo sapiens RIBIIR gene (partial), exon 12
5834	15740	25852	6.08	7.0E-69	9966912	NT	Homo sapiens actin-related protein 3-beta (ARP3BETA), mRNA
6589	16469	26659	3.61	6.0E-69	A192764.1	EST_HUMAN	qe62h01.x1 Soares_fetal_lung_Nhl-19W Homo sapiens cDNA clone IMAGE:1743601 3' similar to gbl.L11566 60S RIBOSOMAL PROTEIN L18 (HUMAN);
6589	16469	26660	3.61	6.0E-69	A192764.1	EST_HUMAN	qe62h01.x1 Soares_fetal_lung_Nhl-19W Homo sapiens cDNA clone IMAGE:1743601 3' similar to gbl.L11566 60S RIBOSOMAL PROTEIN L18 (HUMAN);
509	10451		1.88	4.0E-69	A1873630.1	EST_HUMAN	wm26h11.x1 NCI_CGAP_UJ4 Homo sapiens cDNA clone IMAGE:2437125 3'
5565	15481	25554	4.12	4.0E-69	AJ764973.1	EST_HUMAN	wh57506.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2394819 3' similar to TR:O55137
5995	15900	26024	2.43	4.0E-69	4557732	NT	O55137 ACYL-COA THIOESTERASE. ;
5995	15900	26025	2.43	4.0E-69	4557732	NT	Homo sapiens latent transforming growth factor beta binding protein 2 (LTBP2) mRNA
380	10364	20187	2.81	3.0E-69	BE258012.1	EST_HUMAN	Homo sapiens latent transforming growth factor beta binding protein 2 (LTBP2) mRNA
596	10532	20340	1.64	3.0E-69	AF221712.1	NT	601110371F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3351352 5'
							Homo sapiens Smad- and Olf-interacting zinc finger protein mRNA, partial cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1336	11440		1.35	3.0E-69	T80514.1	EST_HUMAN	yd08a02.r1 Soares Infant brain 1NIB Homo sapiens cDNA clone IMAGE:24880 5' similar to SP:A48836
2325	12206		0.88	3.0E-69	5729910	NT	A48836 SPEG III=EGF REPEAT-CONTAINING FIBROPELIN-LIKE PROTEIN - SEA URCHIN ;
3990	13997	23674	0.86	3.0E-69	A1765988.1	EST_HUMAN	Homo sapiens lymphatic vessel endothelial hyaluronan receptor 1 (LYVE-1) mRNA
5209	15087	29105	5.94	3.0E-69	11418185	NT	wh69g08.x1 NC1_CGAP_K1d1 Homo sapiens cDNA clone IMAGE:2385758 3'
6387	16249	26410	1.37	3.0E-69	U52351.1	NT	Homo sapiens acylase 2, mitochondrial (ACO2), mRNA
6457	16318	26485	8.43	3.0E-69	AF268075.1	NT	Homo sapiens arm-repeat protein NPRAP/neurojuncin (CTNND2) mRNA, partial cds
7091	16568		1.26	3.0E-69	AA376399.1	EST_HUMAN	Homo sapiens TRAF6-binding protein T6BP mRNA, complete cds
7417	17284	27491	1.54	3.0E-69	X13223.1	NT	EST88807 HSC172 cells II Homo sapiens cDNA 5' end similar to ribosomal protein S18
7493	17363	27568	2.24	3.0E-69	X06233.1	NT	H. sapiens mRNA for N-acetylglucosamide-(beta 1-4)-galactosyltransferase
8036	17828	28174	3.07	3.0E-69	11432120	NT	H-human mRNA for calcium-binding protein in macrophages (MRP-14) macrophage migration inhibitory factor (MIF)-related protein
8215	18099		7.12	3.0E-69	AA376399.1	EST_HUMAN	Homo sapiens ribosomal protein S15a (RPS15A), mRNA
9168	18911		4.13	3.0E-69	11419157	NT	EST88807 HSC172 cells II Homo sapiens cDNA 5' end similar to ribosomal protein S18
124	10344	20170	1	2.0E-69	AF160252.1	NT	Homo sapiens HGC8.2 protein (HGC8.2), mRNA
124	10344	20171	1	2.0E-69	AF160252.1	NT	Homo sapiens KIAA0553 protein gene, complete cds; and alphalib protein gene, partial cds
398	10344	20170	4.94	2.0E-69	AF160252.1	NT	Homo sapiens KIAA0553 protein gene, complete cds; and alphalib protein gene, partial cds
398	10344	20171	4.94	2.0E-69	AF160252.1	NT	Homo sapiens KIAA0553 protein gene, complete cds; and alphalib protein gene, partial cds
1842	11738	21616	1.2	2.0E-69	BE257857.1	EST_HUMAN	Homo sapiens KIAA0553 protein gene, complete cds; and alphalib protein gene, partial cds
2813	12742		2.73	2.0E-69	AA431157.1	EST_HUMAN	601109444F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3350074 5'
1675	11577	21445	2.35	1.0E-69	AF053788.1	NT	zw71g02.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:791682 5'
5981	15986	26008	3.68	1.0E-69	AW393969.1	EST_HUMAN	Rattus norvegicus brain specific contactin-binding protein CBP90 mRNA, partial cds
6080	16063	26211	1.55	1.0E-69	7662293	NT	QV0-TT0010-031199-045-c07 TT0010 Homo sapiens cDNA
6080	16063	26212	1.55	1.0E-69	7662293	NT	Homo sapiens KIAA0716 gene product (KIAA0716), mRNA
6088	16033	26173	2.93	1.0E-69	AB032973.1	NT	Homo sapiens KIAA0716 gene product (KIAA0716), mRNA
6088	16033	26174	2.93	1.0E-69	AB032973.1	NT	Homo sapiens mRNA for KIAA1147 protein, partial cds
7847	17697	27942	5.29	1.0E-69	BE245070.1	EST_HUMAN	Homo sapiens mRNA for KIAA1147 protein, partial cds
7847	17697	27943	5.29	1.0E-69	BE245070.1	EST_HUMAN	TCBAP1E2678 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP2678
8246	18126		23.27	1.0E-69	4504918	NT	TCBAP1E2678 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP2678
9705	18872	28785	1.53	1.0E-69	BF125887.1	EST_HUMAN	Homo sapiens keratin 8 (KRT8) mRNA
							6011762902F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:4025785 5'

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9510	19124		2.32	1.0E-69	AI809994.1	EST_HUMAN	wf64e08.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2360390 3' similar to contains Alu repetitive element; contains element MIR repetitive element;
2284	12717	22065	1.52	8.0E-70	AA230303.1	EST_HUMAN	nc13d12.r1 NCL_CGAP_F11 Homo sapiens cDNA clone IMAGE:1008023
4277	14176	23954	2.16	8.0E-70	L77566.1	NT	Homo sapiens DGS-1 mRNA, 3' end
1771	11670	21547	1.93	7.0E-70	AI497807.1	EST_HUMAN	tm89f01.x1 NCL_CGAP_Brn25 Homo sapiens cDNA clone IMAGE:2165305 3'
1771	11670	21548	1.93	7.0E-70	AI497807.1	EST_HUMAN	tm89f01.x1 NCL_CGAP_Brn25 Homo sapiens cDNA clone IMAGE:2165305 3'
1888	11784	21660	1.63	7.0E-70	AA282955.1	EST_HUMAN	zt15h04.r1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:713239 5'
2018	11909		3.57	7.0E-70	5031668	NT	Homo sapiens tumor suppressor deleted in oral cancer-related 1 (DOC-1R) mRNA
4132	14032	23807	3.86	7.0E-70	4757723	NT	Homo sapiens adenylate cyclase 3 (ADCY3) mRNA
5369	15289	25124	5.28	7.0E-70	AB032369.1	NT	Homo sapiens MIST mRNA, partial cds
5369	15289	25125	5.28	7.0E-70	AB032369.1	NT	Homo sapiens MIST mRNA, partial cds
6138	15985	26120	1.89	7.0E-70	AJ000052.1	NT	Homo sapiens gene encoding splicing factor SF1, exons 2-8
6910	16788	26980	2.36	7.0E-70	AB037715.1	NT	Homo sapiens mRNA for KIAA1294 protein, partial cds
6910	16788	26981	2.36	7.0E-70	AB037715.1	NT	Homo sapiens mRNA for KIAA1294 protein, partial cds
7063	16940	27131	3.98	7.0E-70	M74099.1	NT	Human displacement protein (CCAAT) mRNA
7063	16940	27132	3.98	7.0E-70	M74099.1	NT	Human displacement protein (CCAAT) mRNA
7283	17159	27357	3.72	7.0E-70	X59841.1	NT	Human PBX3 mRNA
7283	17159	27358	3.72	7.0E-70	X59841.1	NT	Human PBX3 mRNA
7428	16441	26627	3.13	7.0E-70	AF153715.1	NT	Homo sapiens phospholipid scramblase 1 gene, exon 1 and 5' flanking region
7445	16457	26848	1.56	7.0E-70	11525964	NT	Homo sapiens karyopherin beta 2b, transporin (TRN2), mRNA
7445	16457	26649	1.56	7.0E-70	11525964	NT	Homo sapiens karyopherin beta 2b, transporin (TRN2), mRNA
8875	18687	28978	1.78	7.0E-70	11526319	NT	Homo sapiens HIR (histone cell cycle regulation defective, S. cerevisiae) homolog A (HIRA), mRNA
8875	18687	28979	1.78	7.0E-70	11526319	NT	Homo sapiens HIR (histone cell cycle regulation defective, S. cerevisiae) homolog A (HIRA), mRNA
863	10780	20630	1.93	6.0E-70	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
2090	11979	21874	1.36	6.0E-70	M30938.1	NT	Human Ku (p70/p80) subunit mRNA, complete cds
2461	12338	22232	0.99	6.0E-70	8923899	NT	Homo sapiens CMP-N-acetylneuraminic acid synthase (LOC55907), mRNA
2505	12723	22268	1.83	5.0E-70	7662307	NT	Homo sapiens KIAA0792 gene product (KIAA0792), mRNA
2505	12723	22269	1.83	5.0E-70	7662307	NT	Homo sapiens KIAA0792 gene product (KIAA0792), mRNA
9116	18879		1.73	5.0E-70	BE166034.1	EST_HUMAN	NR3-HT0487-150200-115-a06 HT0487 Homo sapiens cDNA
1571	11475	21332	0.89	3.0E-70	BE017196.1	EST_HUMAN	RC0-BT0522-071299-011-a12 BT0522 Homo sapiens cDNA
1571	11475	21333	0.89	3.0E-70	BE017196.1	EST_HUMAN	RC0-BT0522-071299-011-a12 BT0522 Homo sapiens cDNA

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5845	15751	25865	3.88	3.0E-70	BF685233.1	EST_HUMAN	602141561F1 NIH_MGC_46 Homo sapiens cDNA clone IMAGE:4302806 5'
5845	15751	25866	3.88	3.0E-70	BF685233.1	EST_HUMAN	602141561F1 NIH_MGC_46 Homo sapiens cDNA clone IMAGE:4302806 5'
674	10608	20426	13.15	2.0E-70	N42161.1	EST_HUMAN	y07a10.r1 Soares melanocyte 2NbhM Homo sapiens cDNA clone IMAGE:270522 5' similar to SW:D3HL_RAT P23266 3-HYDROXYISOBUTYRATE DEHYDROGENASE PRECURSOR ;
674	10608	20427	13.15	2.0E-70	N42161.1	EST_HUMAN	y07a10.r1 Soares melanocyte 2NbhM Homo sapiens cDNA clone IMAGE:270522 5' similar to SW:D3HL_RAT P23266 3-HYDROXYISOBUTYRATE DEHYDROGENASE PRECURSOR ;
689	10622	20449	2.01	2.0E-70	A1246899.1	EST_HUMAN	qx61h01.xt NCI_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2004913 3'
1004	10922	20766	1.7	2.0E-70	8923369	NT	Homo sapiens hypothetical protein FLJ20758 (FLJ20758), mRNA
1167	11079	20924	1.95	2.0E-70	7661983	NT	Homo sapiens KIAA0193 gene product (KIAA0193), mRNA
1167	11079	20925	1.95	2.0E-70	7661983	NT	Homo sapiens KIAA0193 gene product (KIAA0193), mRNA
1387	11292	21148	0.97	2.0E-70	BE467311.1	EST_HUMAN	h264c12.xt NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3212758 3'
1708	11609	21479	2.09	2.0E-70	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
2272	12156		3.62	2.0E-70	AA054010.1	EST_HUMAN	z148g04.r1 Soares retina N2b4HR Homo sapiens cDNA clone IMAGE:330214 5' similar to SW:GAG_HTL1A P03345 GAG POLYPROTEIN ;
3963	13870	23648	3.95	2.0E-70	M69181.1	NT	Human nonmuscle myosin heavy chain-B (MYH10) mRNA, partial cds
5385	15304	25156	8.05	2.0E-70	X72632.1	NT	H. sapiens gene for schwannomin (CS8)
5385	15304	25157	8.05	2.0E-70	X72632.1	NT	H. sapiens gene for schwannomin (CS8)
5766	15673	25780	1.42	2.0E-70	AF310105.1	NT	Homo sapiens NALP1 mRNA, complete cds
5999	15904	26028	1.88	2.0E-70	D12625.1	NT	Human mRNA for NF1 protein isoform (neurofibromin isoform), complete cds
6010	15915	26042	9.83	2.0E-70	AF123074.1	NT	Homo sapiens cytoplasmic dynein intermediate chain 1 mRNA, complete cds
6010	15915	26043	9.83	2.0E-70	AF123074.1	NT	Homo sapiens cytoplasmic dynein intermediate chain 1 mRNA, complete cds
6177	15134	24853	1.69	2.0E-70	11422642	NT	Homo sapiens sialyltransferase 6 (N-acetylglucosaminidase 2,3-sialyltransferase) (SIAT6), mRNA
6618	16498	26685	7.67	2.0E-70	M21741.1	NT	Human guanine nucleotide-binding protein alpha-subunit gene (G-s-alpha), exons 4 and 5
7835	17685	27930	1.3	2.0E-70	AF123303.1	NT	Homo sapiens calcium-binding transporter mRNA, partial cds
8422	18296	28550	3.19	2.0E-70	8923420	NT	Homo sapiens hypothetical protein FLJ20450 (FLJ20450), mRNA
8422	18296	28551	3.19	2.0E-70	8923420	NT	Homo sapiens hypothetical protein FLJ20450 (FLJ20450), mRNA
8908	18716	29010	5.82	2.0E-70	4503520	NT	Homo sapiens eukaryotic translation initiation factor 3, subunit 6 (48kD) (EIF3S6) mRNA
9499	19114	25289	2.58	2.0E-70	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
9499	19114	25290	2.58	2.0E-70	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
3347	13287		2.97	1.0E-70	4507476	NT	Homo sapiens transglutaminase 3 (E polypeptide, protein-glutamine-gamma-glutamyltransferase) (TGM3) mRNA
7642	17492		2.57	1.0E-70	AA442292.1	EST_HUMAN	z564c03.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:757444 5'
8305	18182	28429	13.73	1.0E-70	AV738538.1	EST_HUMAN	AV738538 CB Homo sapiens cDNA clone CBLBG10 5'

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Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5621	15536	25621	6.04	9.0E-71	A1143870.1	EST_HUMAN	q604f01.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1738009 3' similar to TR:O14045 O14045 PHOSPHOTRANSFERASE. ;
5621	15536	25622	6.04	9.0E-71	A1143870.1	EST_HUMAN	q604f01.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1738009 3' similar to TR:O14045 O14045 PHOSPHOTRANSFERASE. ;
6192	16077	26226	1.88	9.0E-71	A1654903.1	EST_HUMAN	wb52c05.x1 NCI_CGAP_GC6 Homo sapiens cDNA clone IMAGE:2309288 3' similar to TR:P97213 P97213 CDU2, CDU1, TCDD, TCDB, TCDE, TCDA, TCDC, CDD1, CDD2, CDD3, AND CDD4 GENES. ;
8811	16077	26226	4.65	9.0E-71	A1654903.1	EST_HUMAN	wb52c05.x1 NCI_CGAP_GC6 Homo sapiens cDNA clone IMAGE:2309288 3' similar to TR:P97213 P97213 CDU2, CDU1, TCDD, TCDB, TCDE, TCDA, TCDC, CDD1, CDD2, CDD3, AND CDD4 GENES. ;
7245	17122		1.97	8.0E-71	AA171451.1	EST_HUMAN	zp21d11.1r1 Stratagene neuroepithelium (#937231) Homo sapiens cDNA clone IMAGE:610101 5' similar to TR:G1143061 G1143061 STRAIN XA34 POL. ;
6363	16226	26386	7.91	7.0E-71	AA442230.1	EST_HUMAN	zv60h06.1r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:759075 5'
7037	16914	27103	1.52	7.0E-71	AA705457.1	EST_HUMAN	zp91a06.x1 Soares_fetal_liver_spleen_1NF1S_S1 Homo sapiens cDNA clone IMAGE:462226 3'
8643	18507	28786	4.18	7.0E-71	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
2163	12050	21951	3.45	5.0E-71	AF056322.1	NT	Homo sapiens SP100-HMG nuclear autoantigen (SP100) mRNA, complete cds
4030	13933	23710	1.38	5.0E-71	AW816405.1	EST_HUMAN	QV4-ST0234-181199-037-05 ST0234 Homo sapiens cDNA
5144	15011	24782	3.2	5.0E-71	A1829496.1	EST_HUMAN	w18h10.x1 NCI_CGAP_U11 Homo sapiens cDNA clone IMAGE:2425315 3'
5586	15501	25577	2.14	5.0E-71	4502740	NT	Homo sapiens cyclin-dependent kinase 6 (CDK6) mRNA
6434	16295	26457	1.59	5.0E-71	M38106.1	NT	Human neurofibromatosis protein type 1 mRNA, 3' end of cds
6548	16406	26585	19.78	5.0E-71	AF072810.1	NT	Homo sapiens transcription factor WSTF mRNA, complete cds
7702	17552		2.26	5.0E-71	X13457.1	NT	Human PrieA4 gene for Alzheimer's disease A4 amyloid protein precursor (exon 2)
8348	18225	28477	1.9	5.0E-71	11436514	NT	Homo sapiens pro-platelet basic protein (includes platelet basic protein, beta-thromboglobulin, connective tissue-activating peptide III, neutrophil-activating peptide-2) (PPBP), mRNA
8528	18400	28668	2	5.0E-71	11438069	NT	Homo sapiens similar to hypothetical protein FLJ20163 (H. sapiens) (LOC63325), mRNA
9067	18848	29116	1.84	5.0E-71	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
9411	19083		1.62	5.0E-71	11418039	NT	Homo sapiens RNA binding motif protein 9 (RBM9), mRNA
97	10082	19899	1.13	4.0E-71	4507592	NT	Homo sapiens tumor necrosis factor (ligand) superfamily, member 10 (TNFSF10) mRNA
347	10306	20123	115.63	4.0E-71	AF157626.1	NT	Equus caballus glyceraldehyde-3-phosphate dehydrogenase mRNA, partial cds
347	10306	20124	115.63	4.0E-71	AF157626.1	NT	Equus caballus glyceraldehyde-3-phosphate dehydrogenase mRNA, partial cds
2850	12778	22666	0.88	4.0E-71	7705414	NT	Homo sapiens hook1 protein (HOOK1), mRNA
2850	12778	22667	0.88	4.0E-71	7705414	NT	Homo sapiens hook1 protein (HOOK1), mRNA
2857	12785	22575	1.63	4.0E-71	4505880	NT	Homo sapiens plasminogen (PLG) mRNA
4330	14227	24009	3.35	4.0E-71	AF056322.1	NT	Homo sapiens SP100-HMG nuclear autoantigen (SP100) mRNA, complete cds
4913	14792	24567	4.99	4.0E-71	7657802	NT	Homo sapiens putative heme-binding protein (SOUL), mRNA

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8077	17968	28218	3.32	3.0E-71	AA557683.1	EST_HUMAN	n145h10.s1 NCL_CGAP_Pr4 Homo sapiens cDNA clone IMAGE:1043683 similar to contains PTR5.13 PTR5 repetitive element;
1210	11119	20968	2.82	2.0E-71	AL163206.2	NT	Homo sapiens chromosome 21 segment HS21C006
5259	15181	24957	6.96	2.0E-71	D87482.1	NT	Human mRNA for KIAA0272 gene, partial cds
5259	15181	24958	6.96	2.0E-71	D87482.1	NT	Human mRNA for KIAA0272 gene, partial cds
8022	17872	28114	2.56	2.0E-71	AF095703.1	NT	Homo sapiens short chain L-3-hydroxyacyl-CoA dehydrogenase precursor (HADHSC) gene, nuclear gene encoding mitochondrial protein, complete cds
8022	17872	28115	2.56	2.0E-71	AF095703.1	NT	Homo sapiens short chain L-3-hydroxyacyl-CoA dehydrogenase precursor (HADHSC) gene, nuclear gene encoding mitochondrial protein, complete cds
8079	17970	28219	2.3	2.0E-71	BE018477.1	EST_HUMAN	bb81a06.y1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3048754 5' similar to SW:R23B_HUMAN P54727 UV EXCISION REPAIR PROTEIN RAD23 HOMOLOG B;
9181	18920		6.22	2.0E-71	T95489.1	EST_HUMAN	ye43609.1 Soares fetal liver spleen INFLS Homo sapiens cDNA clone IMAGE:120520 5'
622	10559	20371	2.11	1.0E-71	A1077927.1	EST_HUMAN	oy15a03.s1 Soares senescent_fibroblasts_NbHSF Homo sapiens cDNA clone IMAGE:1665916 3' similar to contains LOR1.b2 LOR1 repetitive element;
926	10851	20699	1.93	1.0E-71	7708281	NT	Homo sapiens neuronal cell death-related protein (LOC51616), mRNA
1084	11000	20841	4.01	1.0E-71	AF205890.1	NT	Homo sapiens disabled-2 gene, exons 2 through 15 and complete cds
1317	11224	21080	10.59	1.0E-71	AF012872.1	NT	Homo sapiens phosphatidylinositol 4-kinase 230 (p4K230) mRNA, complete cds
2036	11927	21821	1.23	1.0E-71	AB017007.1	NT	Homo sapiens PMS2L16 mRNA, partial cds
2036	11927	21822	1.23	1.0E-71	AB017007.1	NT	Homo sapiens PMS2L16 mRNA, partial cds
2661	12528	22416	4.85	1.0E-71	7657153	NT	Homo sapiens hairy/enhancer-of-split related with YRPW motif-like (HEYL), mRNA
3457	13373	23179	1.17	1.0E-71	AF119665.1	NT	Homo sapiens inorganic pyrophosphatase mRNA, complete cds
3546	13462	23256	4.73	1.0E-71	AF246219.1	NT	Homo sapiens SNARE protein kinase SNAK mRNA, complete cds
3546	13462	23257	4.73	1.0E-71	AF246219.1	NT	Homo sapiens SNARE protein kinase SNAK mRNA, complete cds
3597	13511	23298	0.94	1.0E-71	BE122850.1	EST_HUMAN	02_15 Human Epidermal Keratinocyte Subtraction Library- Upregulated Transcripts Homo sapiens cDNA clone 02_15 5' similar to Homo sapiens chromosome 19
3597	13511	23299	0.94	1.0E-71	BE122850.1	EST_HUMAN	02_15 Human Epidermal Keratinocyte Subtraction Library- Upregulated Transcripts Homo sapiens cDNA clone 02_15 5' similar to Homo sapiens chromosome 19
3681	13595	23381	1.87	1.0E-71	AF218904.1	NT	Homo sapiens attractin precursor (ATRN) gene, exon 19
4370	14268	24060	1.86	1.0E-71	D28476.1	NT	Human mRNA for KIAA0045 gene, complete cds
6044	15947	26079	1.4	1.0E-71	11428182	NT	Homo sapiens GCN5 (general control of amino-acid synthesis, yeast, homolog)-like 2 (GCN5L2), mRNA
6326	16189	26351	10.62	1.0E-71	U80753.1	NT	Homo sapiens CAGL79 mRNA, partial cds
6750	16629	26816	6.96	1.0E-71	11425430	NT	Homo sapiens myomesin (M-protein) 2 (165kD) (MYOM2), mRNA
6916	16794	26995	4.18	1.0E-71	8922811	NT	Homo sapiens hypothetical protein FLJ10998 (FLJ10998), mRNA

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6916	16794	26987	4.18	1.0E-71	8922811	NT	Homo sapiens hypothetical protein FLJ10998 (FLJ10998), mRNA
7748	17598	27820	6.49	1.0E-71	AY007643.1	NT	Homo sapiens cytochrome c oxidase subunit VIIa-related protein gene, complete cds
7792	17642		3.39	1.0E-71	AV761217.1	EST_HUMAN	AV761217 MDS Homo sapiens cDNA clone MDSEIA03 5'
8164	18052		4.87	1.0E-71	AV761217.1	EST_HUMAN	AV761217 MDS Homo sapiens cDNA clone MDSEIA03 5'
8256	18136	28383	3.2	1.0E-71	11418903	NT	Homo sapiens coagulation factor XIII, A1 polypeptide (F13A1), mRNA
8486	18359	28623	2.33	1.0E-71	11417191	NT	Homo sapiens leucyl/cystinyl aminopeptidase (LNPEP), mRNA
8486	18359	28624	2.33	1.0E-71	11417191	NT	Homo sapiens leucyl/cystinyl aminopeptidase (LNPEP), mRNA
9547	19147		4.48	1.0E-71	AB011399.1	NT	Homo sapiens gene for AF-6, complete cds
401	10347	20173	1.15	9.0E-72	A1857635.1	EST_HUMAN	wk95g03.x1 NCL CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2423188 3' similar to TR:O86705 O86705 HYPOTHETICAL 38.6 KD PROTEIN. ; contains Alu repetitive element;
401	10347	20174	1.15	9.0E-72	A1857635.1	EST_HUMAN	wk95g03.x1 NCL CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2423188 3' similar to TR:O86705 O86705 HYPOTHETICAL 38.6 KD PROTEIN. ; contains Alu repetitive element;
4023	13926	23700	5.23	7.0E-72	4501866	NT	Homo sapiens aconitase 2, mitochondrial (ACO2), nuclear gene encoding mitochondrial protein, mRNA
4023	13926	23701	5.23	7.0E-72	4501866	NT	Homo sapiens aconitase 2, mitochondrial (ACO2), nuclear gene encoding mitochondrial protein, mRNA
4023	13926	23702	5.23	7.0E-72	4501866	NT	Homo sapiens aconitase 2, mitochondrial (ACO2), nuclear gene encoding mitochondrial protein, mRNA
6228	16094	26244	2.94	7.0E-72	S41694.1	NT	{pseudogene} PTMAP2=prothymosin alpha [human, Genomic, 1192 nt, segment 2 of 3]
6885	16784		3.72	6.0E-72	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
8788	18603	28893	2.22	6.0E-72	BF059578.1	EST_HUMAN	7k63a05.x1 NCL CGAP_GC6 Homo sapiens cDNA clone IMAGE:3480080 3' similar to SW:KMLC_RABIT P07313 MYOSIN LIGHT CHAIN KINASE, SKELETAL MUSCLE ;
56	10043	19854	0.88	5.0E-72	BF333707.1	EST_HUMAN	QV0-CS0010-150900-398-e11 CS0010 Homo sapiens cDNA
56	10043	19855	0.88	5.0E-72	BF333707.1	EST_HUMAN	QV0-CS0010-150900-398-e11 CS0010 Homo sapiens cDNA
57	10043	19854	2.95	5.0E-72	BF333707.1	EST_HUMAN	QV0-CS0010-150900-398-e11 CS0010 Homo sapiens cDNA
57	10043	19855	2.95	5.0E-72	BF333707.1	EST_HUMAN	QV0-CS0010-150900-398-e11 CS0010 Homo sapiens cDNA
1122	11037		2.75	5.0E-72	L11645.1	NT	Homo sapiens alpha-tubulin mRNA, complete cds
6150	16023	26163	1.47	5.0E-72	AU128584.1	EST_HUMAN	AU128584 NT2RP2 Homo sapiens cDNA clone NT2RP2003761 5'
7097	16974	27167	3.55	5.0E-72	AW161274.1	EST_HUMAN	au80c03.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2782564 5' similar to TR:Q99785 Q99785 HYPOTHETICAL 32.4 KD PROTEIN ; contains element MSR1 repetitive element ;
8569	18437	28706	3.18	5.0E-72	BF331571.1	EST_HUMAN	MR4-BT0598-010600-005-d05 BT0598 Homo sapiens cDNA
8569	18437	28707	3.18	5.0E-72	BF331571.1	EST_HUMAN	MR4-BT0598-010600-005-d05 BT0598 Homo sapiens cDNA
9253	19700		2.43	5.0E-72	BE926645.1	EST_HUMAN	QV1-BT0632-280900-342-a10 BT0632 Homo sapiens cDNA

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4716	14602		1.06	4.0E-72	11034844	NT	Homo sapiens hypothetical protein dJ1057B20.2 (Dj1057B20.2), mRNA
6380	16242	26402	1.4	4.0E-72	5729867	NT	Homo sapiens hcd domain and RLD 2 (HERC2), mRNA
7633	17484	27705	1.42	4.0E-72	8923669	NT	Homo sapiens hypothetical protein FLJ20758 (FLJ20758), mRNA
8815	18628	28917	7.32	4.0E-72	H79421.1	EST_HUMAN	y428a03.1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:235084 5'
8929	18737	29030	2.76	4.0E-72	T81910.1	EST_HUMAN	y429d09.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:109649 3'
9603	19185	25249	4.2	4.0E-72	AJ277546.2	NT	Homo sapiens WEE1 gene for protein kinase and partial ZNF143 gene for zinc finger transcription factor
885	10811		4.88	3.0E-72	AA723823.1	EST_HUMAN	ah63a06.s1 Soares testis_NHT Homo sapiens cDNA clone 1310290 3'
1139	11053	20894	6.06	3.0E-72	U163306.1	NT	Human chondroitin sulfate proteoglycan versican V0 splice-variant precursor peptide mRNA, complete cds
1139	11053	20895	6.06	3.0E-72	U163306.1	NT	Human chondroitin sulfate proteoglycan versican V0 splice-variant precursor peptide mRNA, complete cds
3037	12965	22769	10.51	3.0E-72	AJ229043.1	NT	Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22, segment 3/3
3241	13164	22963	2.63	3.0E-72	8923548	NT	Homo sapiens hypothetical protein FLJ20585 (FLJ20585), mRNA
3750	13663	23445	2.51	3.0E-72	S77599.1	NT	TCR V delta 2-C alpha =T-cell receptor delta and C alpha fusion gene (alternatively spliced, splice junction) [human, precursor B-cell line REH, mRNA Partial, 211 nt]
4445	14339	24129	3.22	3.0E-72	11416196	NT	Homo sapiens hypothetical protein (FLJ11127), mRNA
4835	14717	24500	0.94	3.0E-72	A1654337.1	EST_HUMAN	wb31a08.x1 NCI_CGAP_GC6 Homo sapiens cDNA clone IMAGE:2307254 3'
5639	15552	25643	2.4	3.0E-72	AF073367.1	NT	Homo sapiens growth factor receptor-bound protein 10 (GRB10) gene, exon 5
5639	15552	25644	2.4	3.0E-72	AF073367.1	NT	Homo sapiens growth factor receptor-bound protein 10 (GRB10) gene, exon 5
5743	15651	25768	4.35	3.0E-72	AB029004.1	NT	Homo sapiens mRNA for KIAA1081 protein, partial cds
5743	15651	25769	4.35	3.0E-72	AB029004.1	NT	Homo sapiens mRNA for KIAA1081 protein, partial cds
5988	15893	26016	3.02	3.0E-72	4826987	NT	Homo sapiens ribosomal protein L3-like (RPL3L) mRNA
6475	16334		2.32	3.0E-72	U80017.1	NT	Homo sapiens basic transcription factor 2 p44 (btf2p44) gene, partial cds, neuronal apoptosis inhibitory protein (naip) and survival motor neuron protein (smn) genes, complete cds
6755	16634	26822	1.26	3.0E-72	5031892	NT	Homo sapiens nuclear receptor subfamily 1, group H, member 3 (NR1H3), mRNA
7960	17810	28051	1.3	3.0E-72	X98289.1	NT	Homo sapiens S100A12 gene for Calgranulin C, exon 2 and joined cds
9516	19129	25262	1.85	3.0E-72	AB011399.1	NT	Homo sapiens gene for AF-6, complete cds
8122	18010	28257	4.45	2.0E-72	AA789277.1	EST_HUMAN	aj28b09.s1 Soares testis_NHT Homo sapiens cDNA clone 1391609 3' similar to gb:X02067 H sapiens mRNA for 7SL RNA pseudogene (HUMAN);
9600	19182	25246	3.74	2.0E-72	AF182714.1	NT	Rattus norvegicus putative phosphate/phosphoenolpyruvate translocator mRNA, complete cds
2030	11921	21812	2.61	1.0E-72	AA849225.1	EST_HUMAN	ai83d02.s1 Soares parathyroid tumor_NbHPA Homo sapiens cDNA clone IMAGE:1387395 3'
5524	15441	25506	3.15	1.0E-72	7657676	NT	Homo sapiens vacuolar protein sorting 41 (yeast homolog) (VPS41), mRNA
5949	15854	25976	19.78	1.0E-72	11321573	NT	Homo sapiens myosin, heavy polypeptide 13, skeletal muscle (MYH13), mRNA

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5949	15854	25977	19.78	1.0E-72	11321578	NT	Homo sapiens myosin, heavy polypeptide 13, skeletal muscle (MYH13), mRNA
6501	16360	26533	3.82	1.0E-72	BE175434.1	EST_HUMAN	RC4-HT0578-170300-012-g02 HT0578 Homo sapiens cDNA
6501	16360	26534	3.82	1.0E-72	BE175434.1	EST_HUMAN	RC4-HT0578-170300-012-g02 HT0578 Homo sapiens cDNA
7532	17383	27594	6.06	1.0E-72	AF222742.1	NT	Homo sapiens synaptic glycoprotein SC2 (SC2) mRNA, complete cds
7532	17383	27595	6.06	1.0E-72	AF222742.1	NT	Homo sapiens synaptic glycoprotein SC2 (SC2) mRNA, complete cds
1443	11348	21213	1.23	9.0E-73	AW374968.1	EST_HUMAN	MR0-CT0063-071099-002-h11 CT0063 Homo sapiens cDNA
8320	18197		23.9	9.0E-73	11424059	NT	Homo sapiens ribosomal protein L13a (RPL13A), mRNA
1022	10939	20782	1.03	8.0E-73	AW071755.1	EST_HUMAN	ws55c06.x1 NCL CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2501098 3' similar to TR:Q59050
1399	11304	21163	3.06	8.0E-73	A1024877.1	EST_HUMAN	Q59050 HYPOTHETICAL PROTEIN MJ1656. ;
5959	15864	25986	4.6	8.0E-73	11426469	NT	ov39h08.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1639743 3'
6715	16595	26785	2	8.0E-73	AF113129.1	NT	Homo sapiens lysozyme homolog (LOC57151), mRNA
							Homo sapiens vacuolar ATPase isoform VA68 mRNA, complete cds
7385	17254	27459	15.88	8.0E-73	BE019900.1	EST_HUMAN	bb2a06.y1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3030034 5' similar to gb:X04098_cds1 ACTIN, CYTOPLASMIC 2 (HUMAN); gb:M21495 Mouse cytoskeletal gamma-actin mRNA, complete cds (MOUSE);
7614	17465	27682	2.22	8.0E-73	11526037	NT	Homo sapiens interleukin 12 receptor, beta 1 (IL12RB1), mRNA
7614	17465	27683	2.22	8.0E-73	11526037	NT	Homo sapiens interleukin 12 receptor, beta 1 (IL12RB1), mRNA
9446	19081	25282	2.12	8.0E-73	AB02059.1	NT	Homo sapiens DNA for Human P2XM, complete cds
9654	19217	25235	2.69	8.0E-73	11418189	NT	Homo sapiens thyroid autoantigen 70kD (Ku antigen) (G22P1), mRNA
1118	11033	20875	0.78	7.0E-73	8923250	NT	Homo sapiens hypothetical protein FLJ20309 (FLJ20309), mRNA
3261	13184	22983	1.06	7.0E-73	AL163206.2	NT	Homo sapiens chromosome 21 segment HS21C006
4863	14743		1.62	7.0E-73	AL163282.2	NT	Homo sapiens chromosome 21 segment HS21C082
152	10126		2.37	6.0E-73	AL163218.2	NT	Homo sapiens chromosome 21 segment HS21C018
6255	16121	26274	3.36	6.0E-73	BE166574.1	EST_HUMAN	QV0-HT0494-020300-137-d03 HT0494 Homo sapiens cDNA
5215	15138	24832	2.05	4.0E-73	11422159	NT	Homo sapiens HELG protein (FAM44A1), mRNA
1818	11715	21595	0.99	3.0E-73	11435913	NT	Homo sapiens heme-binding protein (HEBP), mRNA
1818	11715	21596	0.99	3.0E-73	11435913	NT	Homo sapiens heme-binding protein (HEBP), mRNA
833	10760	20610	1.75	2.0E-73	AF139897.1	NT	Homo sapiens BASS1 (BASS1) mRNA, partial cds
1902	11798		1.48	2.0E-73	AW898081.1	EST_HUMAN	RC3-NN0066-270400-011-c04 NN0066 Homo sapiens cDNA
2251	12135		1.1	2.0E-73	U01317.1	NT	Human beta globin region on chromosome 11
3144	13069	22869	3.48	2.0E-73	4502582	NT	Homo sapiens caspase 8, apoptosis-related cysteine protease (CASP8) mRNA
3503	13420	23221	0.96	2.0E-73	7689539	NT	Homo sapiens Parkinson disease (autosomal recessive, juvenile) 2, parkin (PARK2), transcript variant 3, mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3503	13420	23222	0.96	2.0E-73	7669539	NT	Homo sapiens Parkinson disease (autosomal recessive, juvenile) 2, parkin (PARK2), transcript variant 3, mRNA
5902	15808	25933	7.6	2.0E-73	AB046811.1	NT	Homo sapiens mRNA for KIAA1591 protein, partial cds
6023	15927	26058	1.35	2.0E-73	11431471	NT	Homo sapiens interleukin 4 receptor (IL4R), mRNA
6023	15927	26059	1.35	2.0E-73	11431471	NT	Homo sapiens interleukin 4 receptor (IL4R), mRNA
7956	17806	28048	1.34	2.0E-73	4504168	NT	Homo sapiens glutathione synthetase (GSS) mRNA
7993	17843	28085	2.45	2.0E-73	11496980	NT	Homo sapiens supervillin (SVIL), transcript variant 1, mRNA
7993	17843	28086	2.45	2.0E-73	11496980	NT	Homo sapiens supervillin (SVIL), transcript variant 1, mRNA
8138	18026	28272	4.14	2.0E-73	11431598	NT	Homo sapiens KIAA1080 protein; Golgi-associated, gamma-adaptin ear containing, ARF-binding protein 2 (KIAA1080), mRNA
8408	18284	28537	3.79	2.0E-73	4557612	NT	Homo sapiens galactosylceramidase (Krabbe disease) (GALC), mRNA
8408	18284	28538	3.79	2.0E-73	4557612	NT	Homo sapiens galactosylceramidase (Krabbe disease) (GALC), mRNA
8432	18306	28562	1.78	2.0E-73	AB028982.1	NT	Homo sapiens mRNA for KIAA1059 protein, partial cds
9447	11798		1.72	2.0E-73	AW898081.1	EST_HUMAN	RC3-NN0066-270400-011-c04 NN0066 Homo sapiens cDNA
1743	11644	21512	1.57	1.0E-73	AU121585.1	EST_HUMAN	AU121585 MAMMA1 Homo sapiens cDNA clone MAMMA1000490 5'
2434	12311	22207	0.93	1.0E-73	AF198349.1	NT	Gallus gallus Dach2 protein (Dach2) mRNA, complete cds
7469	17329	27534	1.36	1.0E-73	AI147427.1	EST_HUMAN	qg61b07.r1 Soares, testis_NHT Homo sapiens cDNA clone IMAGE:1839637 5' similar to contains element MER22 repetitive element ;
8747	17896	28140	2.67	1.0E-73	BE385477.1	EST_HUMAN	60127607F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3617105 5'
723	10655	20485	1.39	8.0E-74	4557426	NT	Homo sapiens CD99-like 4 (CD99L4) mRNA
5606	15521	25602	1.84	8.0E-74	S83194.1	NT	Ca2+/calmodulin-dependent protein kinase IV kinase isoform [rats, brain, mRNA, 3429 nt]
5606	15521	25603	1.84	8.0E-74	S83194.1	NT	Ca2+/calmodulin-dependent protein kinase IV kinase isoform [rats, brain, mRNA, 3429 nt]
1906	11801	21679	3.01	7.0E-74	AJ001689.1	NT	Homo sapiens NKG2D gene, exon 10
3286	13207	23007	0.99	7.0E-74	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
7327	17231	27432	2	7.0E-74	BE967432.1	EST_HUMAN	601649284F1 NIH_MGC_73 Homo sapiens cDNA clone IMAGE:3932997 5'
9653	19216	25234	2.81	7.0E-74	BE266305.1	EST_HUMAN	601197927F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3535855 5'
1106	11022	20865	2.58	6.0E-74	AF109907.1	NT	Homo sapiens S104 gene, partial cds; PS1 and hypothetical protein genes, complete cds; and S171 gene, partial cds
1609	11514	21373	1.03	6.0E-74	AW263177.1	EST_HUMAN	xn78g07.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2700636 3'
2268	12152	22050	9.96	6.0E-74	BE388280.1	EST_HUMAN	601283521F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3605453 5'
2268	12152	22051	9.96	6.0E-74	BE388280.1	EST_HUMAN	601283521F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3605453 5'
2834	12762	22553	1.39	6.0E-74	AW014039.1	EST_HUMAN	UIH-B10-aah-h-03-0-UI s1 NCI_CGAP_Sub1 Homo sapiens cDNA clone IMAGE:2709365 3'
2834	12762	22554	1.39	6.0E-74	AW014039.1	EST_HUMAN	UIH-B10-aah-h-03-0-UI s1 NCI_CGAP_Sub1 Homo sapiens cDNA clone IMAGE:2709365 3'
3652	13566	23352	2.63	6.0E-74	BE048846.1	EST_HUMAN	hr54et1.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3132332 3'

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Table 4
Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3652	13566	23353	2.63	6.0E-74	BE048946.1	EST_HUMAN	h54e11.x1 NCL CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3132332 3'
5294	15215	25016	2.49	6.0E-74	11056013	NT	Homo sapiens actin filament associated protein (AFAP), mRNA
887	10813	20661	2.38	5.0E-74	AW020986.1	EST_HUMAN	d17c09.y1 Morton Fetal Cochlea Homo sapiens cDNA clone IMAGE:2483704 5'
2669	12534		5.19	5.0E-74	AW362756.1	EST_HUMAN	PMO-CT0289-271099-001-h07 CT0289 Homo sapiens cDNA
5320	15240	25045	2.15	5.0E-74	11425417	NT	Homo sapiens phosphatidylinositol glycan, class L (PIGL), mRNA
5339	15456	25526	10.48	5.0E-74	X89670.1	NT	H. sapiens mRNA for TPCR16 protein
							Homo sapiens VAMP (vesicle-associated membrane protein)-associated protein A (33kD) (VAPA) mRNA, and translated products
5563	15479	25552	6.74	5.0E-74	4507866	NT	
5502	15516	25594	1.85	5.0E-74	11431471	NT	Homo sapiens Interleukin 4 receptor (IL4R), mRNA
5602	15516	25595	1.85	5.0E-74	11431471	NT	Homo sapiens Interleukin 4 receptor (IL4R), mRNA
6120	16014	26152	3.73	5.0E-74	7662263	NT	Homo sapiens KIAA0716 gene product (KIAA0716), mRNA
6884	16564	26758	2.89	5.0E-74	11345483	NT	Homo sapiens hypothetical protein FLJ13222 (FLJ13222), mRNA
8117	18006	28252	1.88	5.0E-74	Y09420.1	NT	H. sapiens mRNA for HIP-1
8117	18006	28253	1.88	5.0E-74	Y09420.1	NT	H. sapiens mRNA for HIP-1
278	10243	20063	1.89	4.0E-74	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
834	10761	20611	4.95	4.0E-74	AB028942.1	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
							Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
1919	11814	21692	2.44	4.0E-74	AB028988.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
1919	11814	21693	2.44	4.0E-74	AB028988.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
2027	11918	21808	4.34	4.0E-74	4506192	NT	Homo sapiens proteasome (prosome, macropain) subunit, beta type, 1 (PSMB1) mRNA
2027	11918	21809	4.34	4.0E-74	4506192	NT	Homo sapiens proteasome (prosome, macropain) subunit, beta type, 1 (PSMB1) mRNA
2085	11975	21870	1.21	4.0E-74	AB032994.1	NT	Homo sapiens mRNA for KIAA1168 protein, partial cds
2377	12257	22149	0.99	4.0E-74	AJ006976.1	NT	Homo sapiens PLP gene
3052	12979	22772	4.44	4.0E-74	AJ006976.1	NT	Homo sapiens PLP gene
3483	13399	23204	0.93	4.0E-74	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
3973	13880	23655	1.31	4.0E-74	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
4457	14351	24142	1.57	4.0E-74	7662183	NT	Homo sapiens KIAA0569 gene product (KIAA0569), mRNA
4512	14405	24192	0.82	4.0E-74	Z17227.1	NT	Homo sapiens mRNA for transmembrane receptor protein
							Homo sapiens hydroxyl-Coenzyme A dehydrogenase/3-ketocacyl-Coenzyme A thiolase/enoyl-Coenzyme A hydratase (trifunctional protein), beta subunit (HADHB) mRNA
5006	14880	24644	3.76	4.0E-74	4504326	NT	Homo sapiens hydroxyl-Coenzyme A dehydrogenase/3-ketocacyl-Coenzyme A thiolase/enoyl-Coenzyme A hydratase (trifunctional protein), beta subunit (HADHB) mRNA
5006	14880	24645	3.76	4.0E-74	4504326	NT	Homo sapiens hydroxyl-Coenzyme A dehydrogenase/3-ketocacyl-Coenzyme A thiolase/enoyl-Coenzyme A hydratase (trifunctional protein), beta subunit (HADHB) mRNA
6977	16854		5.03	3.0E-74	AA300378.1	EST_HUMAN	EST13131 Thymus tumor III Homo sapiens cDNA 5' end similar to similar to ribosomal protein L37

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7394	17312	27519	2.42	3.0E-74	M78984.1	EST_HUMAN	EST01132 Subtracted Hippocampus, Striatum (cat. #936205) Homo sapiens cDNA clone HH-CPF91
7921	17771	28010	2.22	3.0E-74	AA601493.1	EST_HUMAN	nc017905.s1 NCI_CGAP_Phet1 Homo sapiens cDNA clone IMAGE:1100984 3'
942	10867	20714	126.24	2.0E-74	7669491	NT	Homo sapiens glyceraldehyde-3-phosphate dehydrogenase (GAPD), mRNA
942	10867	20715	126.24	2.0E-74	7669491	NT	Homo sapiens glyceraldehyde-3-phosphate dehydrogenase (GAPD), mRNA
1158	11071	20916	1.01	2.0E-74	AF020092.1	NT	Human endogenous retrovirus HERV-K-T47D
1224	11132	20986	1.15	2.0E-74	AI950528.1	EST_HUMAN	wx51e07.x1 NCI_CGAP_Lu28 Homo sapiens cDNA clone IMAGE:2647204 3' similar to SW:GG95_HUMAN Q08379 GOLGIN-96; contains element MER22 repetitive element;
1577	11481	21340	2.94	2.0E-74	4885198	NT	Homo sapiens epidermal growth factor receptor (avian erythroblastic leukemia viral (v-erb-b) oncogene homolog) (EGFR) mRNA
1577	11481	21341	2.94	2.0E-74	4885198	NT	Homo sapiens epidermal growth factor receptor (avian erythroblastic leukemia viral (v-erb-b) oncogene homolog) (EGFR) mRNA
2568	12430	22323	1.09	2.0E-74	AI557280.1	EST_HUMAN	P12.1_15_G11.r.tumor2 Homo sapiens cDNA 3'
4937	14815	24582	1.96	2.0E-74	AL355092.1	NT	Novel human gene mapping to chromosome 22
4937	14815	24583	1.95	2.0E-74	AL355092.1	NT	Novel human gene mapping to chromosome 22
4942	14820	24588	1.89	2.0E-74	J02963.1	NT	Human platelet glycoprotein IIb mRNA, 3' end
5543	19446	25630	1.64	2.0E-74	BE711134.1	EST_HUMAN	RC6-HT0678-220500-011-C03 HT0678 Homo sapiens cDNA
5594	19448	25584	1.98	2.0E-74	11439587	NT	Homo sapiens PDZ-73 protein (PDZ-73/NY-CO-38), mRNA
5594	19448	25585	1.98	2.0E-74	11439587	NT	Homo sapiens PDZ-73 protein (PDZ-73/NY-CO-38), mRNA
5629	19448	25584	2.57	2.0E-74	11439587	NT	Homo sapiens PDZ-73 protein (PDZ-73/NY-CO-38), mRNA
5629	19448	25585	2.57	2.0E-74	11439587	NT	Homo sapiens PDZ-73 protein (PDZ-73/NY-CO-38), mRNA
6219	16085	26235	1.55	2.0E-74	BF030788.1	EST_HUMAN	601557524F1 NIH_MGC 58 Homo sapiens cDNA clone IMAGE:3827649 5'
6631	18511	26700	1.43	2.0E-74	AB037816.1	NT	Homo sapiens mRNA for KIAA1395 protein, partial cds
7398	17316	27523	6.54	2.0E-74	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
9387	19047		1.46	2.0E-74	AA196181.1	EST_HUMAN	zp96a06.s1 Striatum muscle 937209 Homo sapiens cDNA clone IMAGE:628018 3'
9903	19380	25196	1.26	2.0E-74	BF666568.1	EST_HUMAN	602121428F1 NIH_MGC 56 Homo sapiens cDNA clone IMAGE:4278569 5'
47	10035	19841	0.97	1.0E-74	7657334	NT	Homo sapiens Misschep/NIK-related kinase (MINK), mRNA
334	10293	20108	3.6	1.0E-74	AW815405.1	EST_HUMAN	QV4-ST0234-181199-037-05 ST0234 Homo sapiens cDNA
491	10434	20247	1.19	1.0E-74	8922829	NT	Homo sapiens hypothetical protein FLJ11026 (FLJ11026), mRNA
497	10439	20252	2.7	1.0E-74	X02344.1	NT	Homo sapiens beta 2 gene
586	10524	20331	1.35	1.0E-74	4508020	NT	Homo sapiens zinc finger protein 259 (ZNF259) mRNA
983	10906	20751	2.17	1.0E-74	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
2179	12066	21968	6.19	1.0E-74	AB002059.1	NT	Homo sapiens DNA for Human P2XM, complete cds
3100	13026	22822	5.96	1.0E-74	4758697	NT	Homo sapiens mannosidase, alpha, class 2A, member 1 (MAN2A1), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3887	13798	23584	4.56	1.0E-74	AL163268.2	NT	Homo sapiens chromosome 21 segment HS21C068
3974	13881	23656	0.9	1.0E-74	BE083080.1	EST_HUMAN	RC2-BT0642-270300-0'9-106 BT0642 Homo sapiens cDNA
4170	14070	23845	0.9	1.0E-74	BE467769.1	EST_HUMAN	h273h08.x1 NCI_CGAP_L124 Homo sapiens cDNA clone IMAGE:3213663 3' similar to WP:B0511.12
5112	14980	24754	1.19	1.0E-74	D83327.1	NT	CE117351 ; Homo sapiens DCRR1 mRNA, partial cds
6894	16574	26765	1.83	1.0E-74	BE549105.1	EST_HUMAN	60107008F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3456260 5'
6894	16574	26766	1.83	1.0E-74	BE549105.1	EST_HUMAN	60107008F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3456260 5'
7112	16989	27182	3.92	1.0E-74	AF214562.1	NT	Homo sapiens tracheal epithelium enriched protein (PLUNC) gene, complete cds
7988	17838	28079	1.31	1.0E-74	11420549	NT	Homo sapiens hypothetical protein FLJ10783 (FLJ10783), mRNA
9024	18818	29108	1.6	1.0E-74	11417856	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2), mRNA
9106	18873		2.83	1.0E-74	11417856	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2), mRNA
9249	12066	21968	4.14	1.0E-74	AB002059.1	NT	Homo sapiens DNA for Human P2XM, complete cds
9720	19261		1.36	1.0E-74	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
2807	12475		4.07	8.0E-75	AF176228.1	NT	Homo sapiens DNA cytosine-5 methyltransferase 3B (DNMT3B) mRNA, complete cds
9406	19059		1.67	8.0E-75	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
2273	12157	22055	0.86	6.0E-75	AI817415.1	EST_HUMAN	wk38a08.x1 NCI_CGAP_P122 Homo sapiens cDNA clone IMAGE:2417654 3' similar to gb:MI41423_cds4
5128	14995		0.86	6.0E-75	AA789285.1	EST_HUMAN	RETROVIRUS-RELATED POLYPROTEIN (HUMAN);
5102	14970	24746	1.04	5.0E-75	BE541305.1	EST_HUMAN	a128c06.s1 Soares_testis_NHT Homo sapiens cDNA clone 1391626 3' similar to TR:Q15377 Q15377 Y-
7395	17313	27520	1.22	5.0E-75	BF690254.1	EST_HUMAN	CHROMOSOME RNA RECOGNITION MOTIF PROTEIN ;
7876	17726	27969	3.1	5.0E-75	AI638623.1	EST_HUMAN	MRO-SN0040-080600-006-g06 SN0040 Homo sapiens cDNA
107	10088	19903	1.05	4.0E-75	BE081333.1	EST_HUMAN	602186616T1 NIH_MGC_49 Homo sapiens cDNA clone IMAGE:4298738 3'
451	10395		1.23	4.0E-75	N36757.1	EST_HUMAN	#31c12.x1 NCI_CGAP_GC08 Homo sapiens cDNA clone IMAGE:2242390 3' similar to TR:P97361 P97361
1728	11629	21498	1.5	4.0E-75	AW897230.1	EST_HUMAN	HYPOTHETICAL 20.1 KD PROTEIN ;
2818	12747	22540	4.65	4.0E-75	BE409464.1	EST_HUMAN	QV1-BT0632-210200-079-e02 BT0632 Homo sapiens cDNA
5792	15698	25806	4.29	4.0E-75	5579157	NT	y460h08.r1 Soares melanocyte 2NbrHM Homo sapiens cDNA clone IMAGE:269055 5'
6052	15953	26084	1.56	4.0E-75	11417946	NT	CMO-NN0057-150400-335-a11 NN0057 Homo sapiens cDNA
6052	15953	26085	1.56	4.0E-75	11417946	NT	CMO-NN0057-150400-335-a11 NN0057 Homo sapiens cDNA
8072	17963	28214	8.72	4.0E-75	7669505	NT	601303866F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3638344 5'
986	10909	20754	2.91	3.0E-75	AF157623.1	NT	Homo sapiens eukaryotic translation initiation factor 3, subunit 8 (110kD) (EIF3S8), mRNA
987	10909	20754	2.25	3.0E-75	AF157623.1	NT	Homo sapiens NIPSNAP, C. elegans, homolog 1 (NIPSNAP1), mRNA
							Homo sapiens NIPSNAP, C. elegans, homolog 1 (NIPSNAP1), mRNA
							Homo sapiens myosin, heavy polypeptide 1, skeletal muscle, adult (MYH1), mRNA
							Homo sapiens HTRA serine protease (PRSS1) gene, complete cds
							Homo sapiens HTRA serine protease (PRSS1) gene, complete cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1795	11693	21569	1.98	3.0E-75	AB011153.1	NT	Homo sapiens mRNA for KIAA0581 protein, partial cds
2065	11955	21852	1.05	3.0E-75	4507334	NT	Homo sapiens synaptotagmin 1 (SYNJ1), mRNA
2373	12253	22144	3.66	3.0E-75	4759153	NT	Homo sapiens synaptosomal-associated protein, 29kD (SNAP29) mRNA
2988	12916	22711	1.19	3.0E-75	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
3152	13077	22877	1.33	3.0E-75	AB011153.1	NT	Homo sapiens mRNA for KIAA0581 protein, partial cds
3306	13227	23030	1.01	3.0E-75	M72393.1	NT	Human calcium-dependent phospholipid-binding protein (PLA2) mRNA, complete cds
3306	13227	23031	1.01	3.0E-75	M72393.1	NT	Human calcium-dependent phospholipid-binding protein (PLA2) mRNA, complete cds
4077	13979	23759	1.42	3.0E-75	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
4336	14233	24015	0.96	3.0E-75	7662421	NT	Homo sapiens KIAA0971 protein (KIAA0971), mRNA
6058	16041	26183	1.53	3.0E-75	11526319	NT	Homo sapiens HIR (histone cell cycle regulation defective, S. cerevisiae) homolog A (HIRA), mRNA
6058	16041	26184	1.53	3.0E-75	11526319	NT	Homo sapiens HIR (histone cell cycle regulation defective, S. cerevisiae) homolog A (HIRA), mRNA
6234	16100	26248	3.83	3.0E-75	7662209	NT	Homo sapiens KIAA0623 gene product (KIAA0623), mRNA
6234	16100	26249	3.83	3.0E-75	7662209	NT	Homo sapiens KIAA0623 gene product (KIAA0623), mRNA
6494	16353	26522	2.92	3.0E-75	4885632	NT	Homo sapiens Oncogene TIM (TIM) mRNA
6494	16353	26523	2.92	3.0E-75	4885632	NT	Homo sapiens Oncogene TIM (TIM) mRNA
7193	17070	27259	1.23	3.0E-75	11420804	NT	Homo sapiens snail 1 (drosophila homolog), zinc finger protein (SNAI1), mRNA
5480	15400		1.5	2.0E-75	AV734680.1	EST_HUMAN	AV734680 cda Homo sapiens cDNA clone cDABED02 5'
7082	16959	27152	1.73	2.0E-75	AI311783.1	EST_HUMAN	q691e02.x1 NCI_CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1915898 3' similar to TR:Q69386 Q69386
2255	12139	22037	5.09	1.0E-75	AW169135.1	EST_HUMAN	POL/ENV GENE ;
2916	12843	22844	3.17	1.0E-75	X52221.1	EST_HUMAN	xg50d02.x1 NCI_CGAP_Ut4 Homo sapiens cDNA clone IMAGE:2632707 3' similar to contains PTR7.11
6903	16781		4.13	1.0E-75	AA399270.1	EST_HUMAN	PTR7 repetitive element ;
7423	17290	27499	3.73	1.0E-75	BF313645.1	EST_HUMAN	H.sapiens ERCC2 gene, exons 1 & 2 (partial)
7423	17290	27500	3.73	1.0E-75	BF313645.1	EST_HUMAN	z157h03.s1 Soares_testis NHT Homo sapiens cDNA clone IMAGE:726485 3' similar to gb:M13932 40S
8257	18137		3.99	1.0E-75	AA664377.1	EST_HUMAN	RIBOSOMAL PROTEIN S17 (HUMAN);
8441	18315	28573	2.6	1.0E-75	AF223391.1	NT	601900294F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4129678 5'
9299	15100	24892	1.86	1.0E-75	BE894192.1	EST_HUMAN	601900294F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4129678 5'
38	10026	19825	1.45	9.0E-76	AI652648.1	EST_HUMAN	ec77b08.s1 Stratagene lung (#937210) Homo sapiens cDNA clone IMAGE:868599 3'
							Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
							601437130F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3922303 5'
							w630b10.x1 NCI_CGAP_GC8 Homo sapiens cDNA clone IMAGE:2307163 3' similar to TR:O75235 O75235
							TRAP1 ;

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
38	10026	19826	1.45	9.0E-76	AI652648.1	EST_HUMAN	wb30b10.x1 NCI_CGAP_GC6 Homo sapiens cDNA clone IMAGE:2307163 3' similar to TR:O75235 O75235
2364	12244		1.16	9.0E-76	AA702415.1	EST_HUMAN	TRAP1;
7697	17547	27770	23.8	9.0E-76	M12937.1	NT	z185b07.s1 Scarses_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:447541 3'
923	10848	20695	1.69	8.0E-76	4504374	NT	Human ferritin Heavy subunit mRNA, complete cds
923	10848	20696	1.69	8.0E-76	4504374	NT	Homo sapiens H factor 1 (complement) (HF1) mRNA
2880	12807	22603	1.06	8.0E-76	7706724	NT	Homo sapiens H factor 1 (complement) (HF1) mRNA
5744	15662	25760	5.38	8.0E-76	11421442	NT	Homo sapiens mediator (Sur2), mRNA
6421	16282	26443	1.3	8.0E-76	11435215	NT	Homo sapiens LIM domain kinase 1 (LIMK1), mRNA
8057	17948	28198	6.44	8.0E-76	10442821	NT	Homo sapiens serine/threonine kinase 2 (STK2), mRNA
9636	19207		1.44	8.0E-76	11417862	NT	Homo sapiens baculoviral IAP repeat-containing 6 (BIRC6), mRNA
							Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
769	10689	20527	4.12	7.0E-76	5016092	NT	Homo sapiens dihydrolipoamide dehydrogenase (E3 component of pyruvate dehydrogenase complex, 2-oxo-glutarate complex, branched chain keto acid dehydrogenase complex) (DLD) mRNA
3254	13177	22975	2.64	7.0E-76	AF050490.1	NT	Homo sapiens cAMP-specific phosphodiesterase 8A (PDE8A) mRNA, partial cds
3260	13183	22982	7.08	7.0E-76	4505052	NT	Homo sapiens lymphocyte antigen 75 (LY75) mRNA, and translated products
3293	13215	23017	1.1	7.0E-76	4757915	NT	Homo sapiens core-binding factor, runt domain, alpha subunit 2; translocated to, 1; cyclin D-related (CBFA2T1) mRNA
4275	14174	23951	4.3	7.0E-76	4507184	NT	Homo sapiens septaplerin reductase (7,8-dihydrobiopterin:NADP+ oxidoreductase) (SPR) mRNA
4275	14174	23952	4.3	7.0E-76	4507184	NT	Homo sapiens septaplerin reductase (7,8-dihydrobiopterin:NADP+ oxidoreductase) (SPR) mRNA
1214	11122		19.65	6.0E-76	BE396253.1	EST_HUMAN	601312019F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3688757 5'
8761	17910	28154	2.69	6.0E-76	BE273201.1	EST_HUMAN	601142253F1 NIH_MGC_14 Homo sapiens cDNA clone IMAGE:3506029 5'
1899	11795	21673	3.69	6.0E-76	D63874.1	NT	Human mRNA for HMG-1, complete cds
1899	11795	21674	3.69	5.0E-76	D63874.1	NT	Human mRNA for HMG-1, complete cds
1899	11795	21675	3.69	5.0E-76	D63874.1	NT	Human mRNA for HMG-1, complete cds
7759	17609	27834	5.6	4.0E-76	D81625.1	EST_HUMAN	HUM178G01B Human fetal brain (TFujiwara) Homo sapiens cDNA clone GEN-178G01 5'
7759	17609	27835	5.6	4.0E-76	D81625.1	EST_HUMAN	HUM178G01B Human fetal brain (TFujiwara) Homo sapiens cDNA clone GEN-178G01 5'
613	10549	20359	1.78	3.0E-76	BF516262.1	EST_HUMAN	UI-H-BW1-amz-b-04-0-UJ.s1 NCI_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3083862 3'
613	10549	20360	1.78	3.0E-76	BF516262.1	EST_HUMAN	UI-H-BW1-amz-b-04-0-UJ.s1 NCI_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3083862 3'
1581	11485	21345	2.78	3.0E-76	4503476	NT	Homo sapiens eukaryotic translation elongation factor 1 beta 2 (EEF1B2) mRNA
1581	11485	21346	2.78	3.0E-76	4503476	NT	Homo sapiens eukaryotic translation elongation factor 1 beta 2 (EEF1B2) mRNA
3382	13300	23099	4.18	3.0E-76	BF375989.1	EST_HUMAN	RC5-ST0300-180100-033-A03 ST0300 Homo sapiens cDNA
3382	13300	23100	4.18	3.0E-76	BF375989.1	EST_HUMAN	RC5-ST0300-180100-033-A03 ST0300 Homo sapiens cDNA
5204	15084	29104	9.13	3.0E-76	Z41314.1	EST_HUMAN	HSCZQD042 normalized Infant brain cDNA Homo sapiens cDNA clone o-zqd04 3'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5842	15748	25861	7.85	3.0E-76	AF286598.1	NT	Homo sapiens angiotensin binding protein 1 mRNA, complete cds
6737	16616	26806	1.92	3.0E-76	N42671.1	EST_HUMAN	yy20g10.r1 Soares melanocyte 2Nblm Homo sapiens cDNA clone IMAGE:271842 5'
7602	17453	27667	3.2	3.0E-76	AW299353.1	EST_HUMAN	xs49h01.x1 NCL CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2773009 3'
7615	17466	27684	1.32	3.0E-76	AA442309.1	EST_HUMAN	zv54d11.1r1 Soares testis NHT Homo sapiens cDNA clone IMAGE:757461 5'
7615	17466	27685	1.32	3.0E-76	AA442309.1	EST_HUMAN	zv54d11.1r1 Soares testis NHT Homo sapiens cDNA clone IMAGE:757461 5'
9014	19537	25062	2.13	3.0E-76	AW937984.1	EST_HUMAN	EST380059 IMAGE resequences, MAGJ Homo sapiens cDNA
9120	19745	24895	3.75	3.0E-76	AW956455.1	EST_HUMAN	EST368525 IMAGE resequences, MAGD Homo sapiens cDNA
280	10245	20065	1.22	2.0E-76	D84295.1	NT	Human mRNA for possible protein TPRDII, complete cds
339	10298	20112	3.66	2.0E-76	D84295.1	NT	Human mRNA for possible protein TPRDII, complete cds
339	10298	20113	3.66	2.0E-76	D84295.1	NT	Human mRNA for possible protein TPRDII, complete cds
453	10397		2.17	2.0E-76	4557662	NT	Homo sapiens immunoglobulin (CD79A) binding protein 1 (IGBP1) mRNA
575	10513	20320	1.07	2.0E-76	4503944	NT	Homo sapiens glucagon (GCG) mRNA
1014	10932	20778	1.03	2.0E-76	4758053	NT	Homo sapiens cAMP responsive element binding protein 1 (CREB1) mRNA
1518	11423	21281	1.53	2.0E-76	4504028	NT	Homo sapiens GM2 ganglioside activator protein (GM2A) mRNA
1518	11423	21282	1.53	2.0E-76	4504028	NT	Homo sapiens GM2 ganglioside activator protein (GM2A) mRNA
1886	11762	21658	1.43	2.0E-76	AA253954.1	EST_HUMAN	zs60h11.s1 Stratagene schizo brain S11 Homo sapiens cDNA clone IMAGE:701925 3'
2811	12740	22536	2.83	2.0E-76	P23266	SWISSPROT	OLFACTORY RECEPTOR-LIKE PROTEIN F5
3257	13180	22979	2.01	2.0E-76	AA445992.1	EST_HUMAN	zw64e02.s1 Soares testis NHT Homo sapiens cDNA clone IMAGE:780986 3' similar to SW:ITB5_HUMAN
3257	13180	22980	2.01	2.0E-76	AA445992.1	EST_HUMAN	P18084 INTEGRIN BETA-5 SUBUNIT PRECURSOR. ;
4043	10245	20065	0.94	2.0E-76	D84295.1	NT	zw64e02.s1 Soares testis NHT Homo sapiens cDNA clone IMAGE:780986 3' similar to SW:ITB5_HUMAN
4867	14747	24527	6.33	2.0E-76	AW876618.1	EST_HUMAN	P18084 INTEGRIN BETA-5 SUBUNIT PRECURSOR. ;
5068	14938	24710	1.25	2.0E-76	5031660	NT	Human mRNA for possible protein TPRDII, complete cds
5453	15374	25432	4.74	2.0E-76	AB029004.1	NT	QV3-OT0028-220300-132-b11 OT0028 Homo sapiens cDNA
6518	16377	26554	1.79	2.0E-76	11427410	NT	Homo sapiens EGF-like repeats and discoidin-like domains 3 (EDIL3), mRNA
7898	17748	27988	3.28	2.0E-76	11437211	NT	Homo sapiens mRNA for KIAA1081 protein, partial cds
8293	18172	28416	2.76	2.0E-76	7549807	NT	Homo sapiens TPOR86 protein (HSTPCR86P), mRNA
4200	14100	23881	2.18	1.0E-76	D63874.1	NT	Homo sapiens similar to ribosomal protein S26 (H. sapiens) (LOC63150), mRNA
4200	14100	23882	2.18	1.0E-76	D63874.1	NT	Homo sapiens HIRA interacting protein 4 (dnaj-like) (HIRIP4), mRNA
5345	15266	25093	5.29	1.0E-76	BE796537.1	EST_HUMAN	Human mRNA for HMG-1, complete cds
6137	15984	28119	3.98	9.0E-77	BE889525.1	EST_HUMAN	Human mRNA for HMG-1, complete cds
4421	14315	24101	1.65	8.0E-77	BF205181.1	EST_HUMAN	Human mRNA for HMG-1, complete cds

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5347	15268	25095	2.46	8.0E-77	4506230	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, non-ATPase, 7 (Mov34 homolog) (PSMD7) mRNA
8691	18578	28861	2.12	8.0E-77	AA019770.1	EST_HUMAN	ze62e02.r1 Soares retina N2b44HR Homo sapiens cDNA clone IMAGE:363578 5'
8691	18578	28862	2.12	8.0E-77	AA019770.1	EST_HUMAN	ze62e02.r1 Soares retina N2b44HR Homo sapiens cDNA clone IMAGE:363578 5'
9771	19289	25232	7.25	8.0E-77	R00245.1	EST_HUMAN	ye69f04.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:123007 3' similar to contains MER10 repetitive element ;
1887	11783	21659	3.28	7.0E-77	AA625755.1	EST_HUMAN	zu91g01.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:745392 3'
2360	12240	22136	2.1	7.0E-77	4505944	NT	Homo sapiens polymerase (RNA) II (DNA directed) polypeptide E (25kD) (POLR2E) mRNA
2360	12240	22137	2.1	7.0E-77	4505944	NT	Homo sapiens polymerase (RNA) II (DNA directed) polypeptide E (25kD) (POLR2E) mRNA
262	10227	20043	4.29	6.0E-77	4504600	NT	Homo sapiens interferon (alpha, beta and omega) receptor 2 (IFNAR2) mRNA
1126	11040	20882	0.9	6.0E-77	AW957753.1	EST_HUMAN	EST369823 IMAGE resequences, IMAGE Homo sapiens cDNA
1524	11429	21287	17.64	6.0E-77	AI204066.1	EST_HUMAN	qe7h12.x1 Soares fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:1745063 3'
1216	11124	20973	1.78	5.0E-77	AF041015.1	NT	7 Homo sapiens glucokinase (GCK) gene, exon 2
1337	11243	21101	1.16	5.0E-77	4567250	NT	Homo sapiens disintegrin and metalloprotease domain 10 (ADAM10) mRNA
2736	12598	22492	0.97	5.0E-77	4503160	NT	Homo sapiens cullin 1 (CUL1) mRNA
4605	14493	24280	2.02	5.0E-77	5031660	NT	Homo sapiens EGF-like repeats and discoidin I-like domains 3 (EDIL3), mRNA
4605	14493	24281	2.02	5.0E-77	5031660	NT	Homo sapiens EGF-like repeats and discoidin I-like domains 3 (EDIL3), mRNA
4853	14733	24514	2.05	5.0E-77	AL043953.1	EST_HUMAN	DKFZp434G1728_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434G1728 5'
6873	16752	26947	1.39	5.0E-77	11428849	NT	Homo sapiens 3-hydroxyisobutyl-Coenzyme A hydrolase (HIBCH), mRNA
6873	16752	26948	1.39	5.0E-77	11428849	NT	Homo sapiens 3-hydroxyisobutyl-Coenzyme A hydrolase (HIBCH), mRNA
7519	17338	27543	2.55	5.0E-77	11421928	NT	Homo sapiens sorting nexin 5 (SNX5), mRNA
7519	17338	27544	2.55	5.0E-77	11421928	NT	Homo sapiens sorting nexin 5 (SNX5), mRNA
7990	17840	28080	1.96	5.0E-77	AB002297.1	NT	Human mRNA for KIAA0299 gene, partial cds
7990	17840	28081	1.96	5.0E-77	AB002297.1	NT	Human mRNA for KIAA0299 gene, partial cds
1929	11824	21705	1.12	3.0E-77	5730038	NT	Homo sapiens SET domain and mariner transposase fusion gene (SETMAR) mRNA
1929	11824	21706	1.12	3.0E-77	5730038	NT	Homo sapiens SET domain and mariner transposase fusion gene (SETMAR) mRNA
8249	18129	28377	3.31	3.0E-77	BF359917.1	EST_HUMAN	PM3-MT0078-080800-005-g03 MT0078 Homo sapiens cDNA
1330	11237	21093	1.71	2.0E-77	AV764617.1	EST_HUMAN	AV764617 MDS Homo sapiens cDNA clone MDSBTF10 5'
1414	11320	21185	1.73	2.0E-77	AW997742.1	EST_HUMAN	RC3-BN0053-170200-011-h01 BN0053 Homo sapiens cDNA
2044	11935	21830	0.84	2.0E-77	L41825.1	NT	Homo sapiens CYP17 gene, 5' end
2056	11946	21842	2.64	2.0E-77	7706315	NT	Homo sapiens CGI-78 protein (LOC51634), mRNA
2549	12724	22312	2.02	2.0E-77	AB037836.1	NT	Homo sapiens mRNA for KIAA1415 protein, partial cds
2549	12724	22313	2.02	2.0E-77	AB037836.1	NT	Homo sapiens mRNA for KIAA1415 protein, partial cds

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3947	13855	23629	1.33	2.0E-77	BE044316.1	EST_HUMAN	ho43b05.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:3040113 3' similar to SW:GAG2_HUMAN P10264 RETROVIRUS-RELATED GAG POLYPROTEIN ;
4315	14212	23996	0.89	2.0E-77	AI613519.1	EST_HUMAN	tw22g02.x1 NCL_CGAP_Brm52 Homo sapiens cDNA clone IMAGE:2260466 3' similar to TR:O65245
4315	14212	23996	0.89	2.0E-77	AI613519.1	EST_HUMAN	O65245 F21E10.7 PROTEIN ;
4492	14386		3.48	2.0E-77	4504068	NT	tw22g02.x1 NCL_CGAP_Brm52 Homo sapiens cDNA clone IMAGE:2260466 3' similar to TR:O65245
							O65245 F21E10.7 PROTEIN ;
							Homo sapiens glutamic-oxaloacetic transaminase 2, mitochondrial (aspartate aminotransferase 2) (GOT2), nuclear gene encoding mitochondrial protein, mRNA
4659	14545	24334	3.58	2.0E-77	AA653025.1	EST_HUMAN	ns58g12.s1 NCL_CGAP_P12 Homo sapiens cDNA clone IMAGE:1188838 similar to SW:RL29_HUMAN
5625	15540	25629	1.8	2.0E-77	BE296940.1	EST_HUMAN	P47914 60S RIBOSOMAL PROTEIN L29, [1] ; contains element MSR1 repetitive element ;
5745	15653	25761	1.34	2.0E-77	BE787143.1	EST_HUMAN	601119852F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3029436 5'
6257	16123	26276	12.74	2.0E-77	AI833003.1	EST_HUMAN	601476802F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3879505 5'
7489	17359	27564	4.99	2.0E-77	U50321.1	NT	at74a09.x1 Barstead colon HPLRB7 Homo sapiens cDNA clone IMAGE:2377720 3' similar to TR:Q13311
7489	17359	27565	4.99	2.0E-77	U50321.1	NT	Q13311 TAX1-BINDING PROTEIN TXBP151, [1] ;
37	10024	19821	0.97	1.0E-77	AB033102.1	NT	Human protein kinase C substrate 80K-H (PRKCSH) gene, exon 7
37	10024	19822	0.97	1.0E-77	AB033102.1	NT	Human protein kinase C substrate 80K-H (PRKCSH) gene, exon 7
							Homo sapiens mRNA for KIAA1276 protein, partial cds
							Homo sapiens mRNA for KIAA1276 protein, partial cds
271	10237	20054	1.87	1.0E-77	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
271	10237	20055	1.87	1.0E-77	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
857	12679	20635	4.95	1.0E-77	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
857	12679	20636	4.95	1.0E-77	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
2394	12272	22768	1.22	1.0E-77	AB029024.1	NT	Homo sapiens mRNA for KIAA1101 protein, complete cds
3007	12935	22727	2.82	1.0E-77	4503300	NT	Homo sapiens 2,4-dienoyl CoA reductase 1, mitochondrial (DEC1), mRNA
4256	14155	23930	2.99	1.0E-77	7706299	NT	Homo sapiens CGI-60 protein (LOC51626), mRNA
4423	14317	24703	14.73	1.0E-77	AJ229041.1	NT	Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22; segment 1/3
4552	14445	24229	1.95	1.0E-77	6552322	NT	Homo sapiens breast cancer 1, early onset (BRCA1), transcript variant BRCA1-exon4, mRNA
5179	15043	24810	2.89	1.0E-77	AW755254.1	EST_HUMAN	CMYA5 Human cardiac muscle expression library Homo sapiens cDNA clone 4151935 similar to CMYA5
							Cardiomyopathy associated gene 5

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5610	15525	25607	1.93	1.0E-77	AF086944.1	NT	Homo sapiens dynactin 1 (DCTN1) gene, exons 27 and 28
5610	15525	25608	1.93	1.0E-77	AF086944.1	NT	Homo sapiens dynactin 1 (DCTN1) gene, exons 27 and 28
5698	15597	25698	1.56	1.0E-77	M25844.1	NT	Human von Willebrand factor gene, exon 20
6197	15957	26089	11.39	1.0E-77	5881412	NT	Homo sapiens elastin (supravalvular aortic stenosis, Williams-Beuren syndrome) (ELN), mRNA
8002	17852	28093	1.22	1.0E-77	AB029396.1	NT	Homo sapiens hu-GlcAT-P mRNA for glucuronyltransferase, complete cds
8002	17852	28094	1.22	1.0E-77	AB029396.1	NT	Homo sapiens hu-GlcAT-P mRNA for glucuronyltransferase, complete cds
8013	17863	28109	2.53	9.0E-78	AW753302.1	EST_HUMAN	RC3-CT0254-280999-011-b05 CT0254 Homo sapiens cDNA
5880	15786	25907	2.97	8.0E-78	AW947061.1	EST_HUMAN	RC2-ET0023-080500-012-e05 ET0023 Homo sapiens cDNA
5880	15786	25908	2.97	8.0E-78	AW947061.1	EST_HUMAN	RC2-ET0023-080500-012-e05 ET0023 Homo sapiens cDNA
80	10064	19881	1.83	6.0E-78	AU118789.1	EST_HUMAN	AU118789 HEMBA1 Homo sapiens cDNA clone HEMBA1004354 5'
80	10064	19882	1.83	6.0E-78	AU118789.1	EST_HUMAN	AU118789 HEMBA1 Homo sapiens cDNA clone HEMBA1004354 5'
5950	16855	19996	2.51	6.0E-78	11432710	NT	Homo sapiens GDNF family receptor alpha 1 (GFRA1), mRNA
211	10182	19996	1.1	5.0E-78	11422486	NT	Homo sapiens hypothetical protein FLJ11316 (FLJ11316), mRNA
2515	12389	22281	4.1	5.0E-78	AW673424.1	EST_HUMAN	ba54h03.y3 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2900405 5' similar to WP.Y48B6A.6
3339	13259	23066	3.81	5.0E-78	M55566.1	NT	CE22121 ; Human collagenase type IV (CLG4) gene, exon 6
5323	15243	25048	2.39	5.0E-78	AF038636.1	NT	Homo sapiens Best's macular dystrophy related protein mRNA, partial cds
5422	15343	25396	9.35	5.0E-78	11416585	NT	Homo sapiens transforming growth factor, beta-induced, 68kD (TGFB1), mRNA
6244	16110	26262	2.17	5.0E-78	AW953120.1	EST_HUMAN	EST365190 MAGE resequences, MAGB Homo sapiens cDNA
7248	17125	27318	6.5	5.0E-78	U60889.1	NT	Human lysosomal alpha-mannosidase (manB) gene, exon 7
7249	17126	27319	3.75	5.0E-78	BE960836.1	EST_HUMAN	601648061F1 NIH_MGC_62 Homo sapiens cDNA clone IMAGE:3931887 5'
1502	11406	21265	1.6	4.0E-78	AL355841.1	NT	Novel human gene mapping to chromosome 22
1629	11533	21393	1.53	4.0E-78	AI985094.1	EST_HUMAN	w197b12.x1 NCI CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2495615 3' similar to SW.WAP_P1G
2270	12154	22053	2.21	4.0E-78	AF107405.1	NT	O46655 WHEY ACIDIC PROTEIN PRECURSOR ;
4227	14125	23989	1.39	4.0E-78	7656876	NT	Homo sapiens pre-mRNA splicing factor (SFRS3) mRNA, complete cds
4664	14550	24340	1.27	4.0E-78	4505806	NT	Homo sapiens syncytin (LOC30816), mRNA
4664	14550	24341	1.27	4.0E-78	4505806	NT	Homo sapiens phosphatidylinositol 4-kinase, catalytic, alpha polypeptide (PIK4CA) mRNA
7967	17817	28058	1.94	4.0E-78	11560151	NT	Homo sapiens phosphatidylinositol 4-kinase, catalytic, alpha polypeptide (PIK4CA) mRNA
7967	17817	28059	1.94	4.0E-78	11560151	NT	Homo sapiens hypothetical C2H2 zinc finger protein FLJ22504 (FLJ22504), mRNA
8721	19538	28822	1.97	4.0E-78	AF169148.1	NT	Homo sapiens hypothetical C2H2 zinc finger protein FLJ22504 (FLJ22504), mRNA
8844	19656	28944	3	4.0E-78	X05844.1	NT	Homo sapiens s-CaBP1 (CABP1) mRNA, complete cds
9664	19224	25239	2.85	4.0E-78	AB011399.1	NT	Human transforming growth factor-beta precursor gene exons 4-5 (and joined mature peptide)
155	10129	19944	1.6	3.0E-78	AF095901.1	NT	Homo sapiens gene for AF-6, complete cds
						NT	Homo sapiens eRF1 gene, complete cds

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
155	10129	19945	1.6	3.0E-78	AF095901.1	NT	Homo sapiens eRF1 gene, complete cds
3178	13103	22908	0.91	3.0E-78	4507164	NT	Homo sapiens nuclear antigen Sp100 (SP100) mRNA
4015	13657	23439	0.93	3.0E-78	4507334	NT	Homo sapiens synaptotagmin 1 (SYNJ1), mRNA
7902	17752		5.55	3.0E-78	BE144758.1	EST_HUMAN	CM0-H10180-041089-065-c07 HT0180 Homo sapiens cDNA
8349	18226	28478	5.52	3.0E-78	BE156318.1	EST_HUMAN	QV0-H10367-150200-114-g09 HT0367 Homo sapiens cDNA
3083	13010		2.22	2.0E-78	U04489.1	NT	Homo sapiens type IV collagen alpha 5 chain (COL4A5) gene, exon 20
3932	13841		1.68	2.0E-78	AA311872.1	EST_HUMAN	EST182583 Jurkat T-cells VI Homo sapiens cDNA 5' end
6412	16274	26435	1.46	2.0E-78	AW402306.1	EST_HUMAN	UI-HF-BK0-aaj-g-10-0-UJ.r1 NIH_MGC_36 Homo sapiens cDNA clone IMAGE:3054139 5'
6412	16274	26436	1.46	2.0E-78	AW402306.1	EST_HUMAN	UI-HF-BK0-aaj-g-10-0-UJ.r1 NIH_MGC_36 Homo sapiens cDNA clone IMAGE:3054139 5'
6547	16405	26584	3.88	2.0E-78	BF689800.1	EST_HUMAN	602186629F1 NIH_MGC_49 Homo sapiens cDNA clone IMAGE:4288599 5'
6687	16557	26761	2.73	2.0E-78	AV714177.1	EST_HUMAN	AV714177 DOB Homo sapiens cDNA clone DGBAWF09 5'
6921	16799	26991	1.84	2.0E-78	AI557509.1	EST_HUMAN	Pt2.1_16 B07.r tumor2 Homo sapiens cDNA 3'
6921	16799	26992	1.84	2.0E-78	AI557509.1	EST_HUMAN	Pt2.1_16 B07.r tumor2 Homo sapiens cDNA 3'
8429	18303	28559	4.5	2.0E-78	AI197837.1	EST_HUMAN	q150h05.x1 NCI_CGAP_Bn25 Homo sapiens cDNA clone IMAGE:1859961 3' similar to WP:R90.1
8467	18340	28605	3.28	2.0E-78	N66951.1	EST_HUMAN	CE063325 PROTEIN KINASE
5247	15170	24943	2.9	1.0E-78	11417304	NT	za48f12.s1 Soares fetal liver spleen 1NLS Homo sapiens cDNA clone IMAGE:295823 3'
6743	16622		1.68	1.0E-78	U52373.1	NT	Homo sapiens GAP-like protein (LOC51306), mRNA
9189	18924	25350	5.14	1.0E-78	11430460	NT	Human serine/threonine kinase MNB (mnb) mRNA, complete cds
							Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
9284	18986	25327	1.26	1.0E-78	11435903	NT	Homo sapiens similar to lymphocyte activation-associated protein (H. sapiens) (LOC68140), mRNA
4900	14488	24274	4.48	9.0E-79	11528891	NT	Homo sapiens peptide YY (PYY), mRNA
4758	14843	24431	2.48	9.0E-79	BE000837.1	EST_HUMAN	RC2-BN0074-090300-014-c12 BN0074 Homo sapiens cDNA
5335	15255	25078	12.03	9.0E-79	AB028070.1	NT	Homo sapiens mRNA for activator of S phase Kinase, complete cds
5827	15733	25844	2.18	9.0E-79	5454145	NT	Homo sapiens ubiquitin-conjugating enzyme E2E 3 (homologous to yeast UBC4/5) (UBE2E3) mRNA
7243	17120	27315	4.99	9.0E-79	U02853.1	NT	Homo sapiens casein kinase II alpha subunit mRNA, complete cds
7243	17120	27316	4.99	9.0E-79	U02853.1	NT	Homo sapiens casein kinase II alpha subunit mRNA, complete cds
7953	17803	28042	1.31	9.0E-79	AF062346.1	NT	Homo sapiens zinc finger protein 216 splice variant 1 (ZNF216) mRNA, complete cds
7953	17803	28043	1.31	9.0E-79	AF062346.1	NT	Homo sapiens zinc finger protein 216 splice variant 1 (ZNF216) mRNA, complete cds
8419	18293	28547	1.82	9.0E-79	AY008273.1	NT	Homo sapiens TRAF6-regulated IKK activator 1 beta Uey1A mRNA, complete cds
8802	18616	28906	2.82	9.0E-79	11423827	NT	Homo sapiens suppressor of white apicort homolog 2 (SWAP2), mRNA
8802	18616	28907	2.82	9.0E-79	11423827	NT	Homo sapiens suppressor of white apicort homolog 2 (SWAP2), mRNA
9854	19347	25213	1.49	9.0E-79	11417877	NT	Homo sapiens gamma-glutamyltransferase 1 (GGT1), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3682	13596	23382	1.2	8.0E-79	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
4391	14287	24069	0.94	8.0E-79	D28476.1	NT	Human mRNA for KIAA0045 gene, complete cds
4391	14287	24070	0.94	8.0E-79	D28476.1	NT	Human mRNA for KIAA0045 gene, complete cds
9107	15097	24889	1.4	8.0E-79	8567387	NT	Human sapiens period (Drosophila) homolog 3 (PER3), mRNA
3214	13138	22941	6.85	7.0E-79	BE619648.1	EST_HUMAN	601472766T1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3875657 3'
9040	18827		1.29	6.0E-79	AA699829.1	EST_HUMAN	294e04.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:462558 3' similar to TR:Q15408 Q15408 NEUTRAL PROTEINASE LARGE SUBUNIT ;
8786	18601	28891	4.15	5.0E-79	AL163282.2	NT	Homo sapiens chromosome 21 segment HS21C082
3139	13064		1.12	4.0E-79	8922325	NT	Homo sapiens hypothetical protein FLJ10283 (FLJ10283), mRNA
4946	14823	24590	1.33	4.0E-79	BF210869.1	EST_HUMAN	601874522F1 NIH_MGC_54 Homo sapiens cDNA clone IMAGE:4101245 5'
310	10272	20091	1.4	3.0E-79	AF114488.1	NT	Homo sapiens intersectin short isoform (ITSN) mRNA, complete cds
962	10885	20733	2.88	3.0E-79	AF232708.1	NT	Homo sapiens cell-line tsA201a chloride ion current inducer protein (Cih) gene, complete cds
3060	12987	22778	1.36	3.0E-79	U09410.1	NT	Human zinc finger protein ZNF131 mRNA, partial cds
5291	15212	25012	4.52	3.0E-79	AF110322.1	NT	Homo sapiens MSTP016 (MST016) mRNA, complete cds
5506	15424	25486	1.71	3.0E-79	AB020699.1	NT	Homo sapiens mRNA for KIAA0892 protein, partial cds
5525	15442	25507	3.47	3.0E-79	11426770	NT	Homo sapiens netrin 1 (NTN1), mRNA
5525	15442	25508	3.47	3.0E-79	11426770	NT	Homo sapiens netrin 1 (NTN1), mRNA
6200	15960	26091	3.28	3.0E-79	AB014520.1	NT	Homo sapiens mRNA for KIAA0620 protein, partial cds
6200	15960	26092	3.28	3.0E-79	AB014520.1	NT	Homo sapiens mRNA for KIAA0620 protein, partial cds
618	10555	20367	1.05	2.0E-79	BE379926.1	EST_HUMAN	601159415F2 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3511107 5'
912	10836	20685	1.14	2.0E-79	4757841	NT	Homo sapiens BCL2-like 2 (BCL2L2) mRNA
1019	10937		1.43	2.0E-79	AI523747.1	EST_HUMAN	fh18h07.x1 NC1_CGAP_Pr28 Homo sapiens cDNA clone IMAGE:2118685 3'
2101	11990	21888	14.14	2.0E-79	4588863	NT	Homo sapiens phosphodiesterase 6A, cGMP-specific, rod, alpha (PDE6A), mRNA
2101	11990	21889	14.14	2.0E-79	4588863	NT	Homo sapiens phosphodiesterase 6A, cGMP-specific, rod, alpha (PDE6A), mRNA
2146	12034	21931	0.99	2.0E-79	AJ271408.1	NT	Homo sapiens mRNA for Fas-associated factor, FAF1 (Faf1 gene)
2265	12149	22049	1.54	2.0E-79	AF244138.1	NT	Homo sapiens hepatocellular carcinoma-associated antigen 88 (HCA88) mRNA, complete cds
3838	13749	23542	0.86	2.0E-79	AF170482.1	NT	Homo sapiens chloride channel CLC4 (CLC4) mRNA, complete cds
4074	13976	23755	1.17	2.0E-79	AJ271408.1	NT	Homo sapiens mRNA for Fas-associated factor, FAF1 (Faf1 gene)
4590	14478	24265	0.96	2.0E-79	AL163206.2	NT	Homo sapiens chromosome 21 segment HS21C006
6251	16117	26270	1.83	2.0E-79	7382479	NT	Homo sapiens Rho GTPase activating protein 6 (ARHGAP6), transcript variant 4, mRNA
6251	16117	26271	1.83	2.0E-79	7382479	NT	Homo sapiens Rho GTPase activating protein 6 (ARHGAP6), transcript variant 4, mRNA
6956	16934	27029	2.6	2.0E-79	11427428	NT	Homo sapiens hypothetical protein FLJ11006 (FLJ11006), mRNA
7808	17658	27896	1.44	2.0E-79	S72869.1	NT	H4(D10S170) putative cytoskeletal protein [human, thyroid, mRNA, 3011 nt]
7808	17658	27897	1.44	2.0E-79	S72869.1	NT	H4(D10S170) putative cytoskeletal protein [human, thyroid, mRNA, 3011 nt]

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Table 4
Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8391	18267	28516	4.22	2.0E-79	BE064386.1	EST_HUMAN	RC4-BT0310-110300-015-f10 BT0310 Homo sapiens cDNA
8391	18267	28517	4.22	2.0E-79	BE064386.1	EST_HUMAN	RC4-BT0310-110300-015-f10 BT0310 Homo sapiens cDNA
9078	15096	24888	2.6	2.0E-79	7682357	NT	Homo sapiens KIAA0879 protein (KIAA0879), mRNA
9161	18907	25341	4.23	2.0E-79	AB020640.1	NT	Homo sapiens mRNA for KIAA0833 protein, partial cds
9391	19050	25307	1.96	2.0E-79	11418322	NT	Homo sapiens cadherin EGF LAG seven-pass G-type receptor 1 (CELSR1), mRNA
5971	19456		2.78	1.0E-79	BF363071.1	EST_HUMAN	MRO-NN0087-280600-017-b10 NN0087 Homo sapiens cDNA
8894	18704	28998	2.74	1.0E-79	BF087405.1	EST_HUMAN	GV2-HT0540-120900-358-a05 HT0540 Homo sapiens cDNA
3107	13033	22828	3.79	9.0E-80	AA725848.1	EST_HUMAN	a123e05.s1 Soares testis NHT Homo sapiens cDNA clone 1343648 3'
3107	13033	22829	3.79	9.0E-80	AA725848.1	EST_HUMAN	a123e05.s1 Soares testis NHT Homo sapiens cDNA clone 1343648 3'
7751	17601	27824	1.28	9.0E-80	BE798603.1	EST_HUMAN	601581652F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3936061 5'
8597	18464	28735	11.05	9.0E-80	11433924	NT	Homo sapiens solute carrier family 7 (cationic amino acid transporter, y+ system), member 8 (SLC7A8), mRNA
8597	18464	28736	11.05	9.0E-80	11433924	NT	Homo sapiens solute carrier family 7 (cationic amino acid transporter, y+ system), member 8 (SLC7A8), mRNA
3551	13466		0.95	8.0E-80	U94387.1	NT	Homo sapiens Y chromosome spermatogenesis candidate protein (RBM) pseudogene mRNA, partial cds
6485	16343	26512	2.83	8.0E-80	11422847	NT	Homo sapiens KIAA0724 gene product (KIAA0724), mRNA
6485	16343	26513	2.83	8.0E-80	11422847	NT	Homo sapiens KIAA0724 gene product (KIAA0724), mRNA
7409	17276	27482	1.19	8.0E-80	6005921	NT	Homo sapiens triple functional domain (PTPRF interacting) (TRIO), mRNA
7409	17276	27483	1.19	8.0E-80	6005921	NT	Homo sapiens triple functional domain (PTPRF interacting) (TRIO), mRNA
882	10808	20857	2.34	6.0E-80	AI422197.1	EST_HUMAN	tf58d02.x1 NCI_CGAP Brn23 Homo sapiens cDNA clone IMAGE:2103459 3' similar to SW:NUEM_HUMAN
1624	11528	21386	2.05	6.0E-80	U64898.1	NT	Q16795 NADH-UBIQUINONE OXIDOREDUCTASE 39 KD SUBUNIT PRECURSOR ;
4188	14088	23865	1.09	6.0E-80	AB032981.1	NT	Homo sapiens NRD convertase mRNA, complete cds
4188	14088	23866	1.09	6.0E-80	AB032981.1	NT	Homo sapiens mRNA for KIAA1155 protein, partial cds
5545	15461	25632	4.01	6.0E-80	11421462	NT	Homo sapiens mRNA for KIAA1155 protein, partial cds
5702	15610	25712	2.56	6.0E-80	AJ404468.1	NT	Homo sapiens malate dehydrogenase 2, NAD (mitochondrial) (MDH2), mRNA
5776	15683	25791	3.84	6.0E-80	11436736	NT	Homo sapiens mRNA for dynein heavy chain (DNAH9 gene)
7123	17000	27191	3.07	6.0E-80	11526464	NT	Homo sapiens tubby like protein 3 (TULP3), mRNA
7123	17000	27192	3.07	6.0E-80	11526464	NT	Homo sapiens G protein-coupled receptor 51 (GPR51), mRNA
7214	17091	27281	1.74	6.0E-80	AL163301.2	NT	Homo sapiens G protein-coupled receptor 51 (GPR51), mRNA
7672	17522	27748	1.68	6.0E-80	U20211.1	NT	Homo sapiens chromosome 21 segment HS21C101
8311	18189	28437	2.91	6.0E-80	11427366	NT	Human cone photoreceptor cGMP-phosphodiesterase alpha' subunit gene, exon 21
							Homo sapiens brefeldin A-inhibited guanine nucleotide-exchange protein 1 (BIG1), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8555	18425	28694	50.71	6.0E-80	AF226730.1	NT	Homo sapiens Cyt19 mRNA, complete cds
9047	10808	20657	1.98	6.0E-80	AI422197.1	EST_HUMAN	tf58d02.x1 NCL CGAP_Brn23 Homo sapiens cDNA clone IMAGE:2103459 3' similar to SW:NUEM_HUMAN Q16795 NADH-UBIQUINONE OXIDOREDUCTASE 39 KD SUBUNIT PRECURSOR ;
9172	19562		1.62	6.0E-80	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
9371	19037		4.55	6.0E-80	AB029900.1	NT	Homo sapiens CST gene for cerebroside sulfoltransferase, exon 1, 2, 3, 4, 5
9847	19686		2.25	6.0E-80	AJ133127.1	NT	Homo sapiens mRNA for sodium-glucose cotransporter (SGLT2 gene)
573	10511	20319	1.11	5.0E-80	4506228	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, non-ATPase, 3 (PSMD3) mRNA
817	10745	20592	1.26	5.0E-80	AF108830.1	NT	Homo sapiens serine-threonine protein kinase (MNBH) mRNA, complete cds
817	10745	20593	1.26	5.0E-80	AF108830.1	NT	Homo sapiens serine-threonine protein kinase (MNBH) mRNA, complete cds
1172	11084		4.77	5.0E-80	X91647.1	NT	H. sapiens nrx1 gene (exon 12)
1440	11345		2.28	5.0E-80	AL163283.2	NT	Homo sapiens chromosome 21 segment HS21C083
2311	12192	22091	0.92	5.0E-80	U89358.1	NT	Human 13mbt protein homolog mRNA, complete cds
2380	12260	22152	3.98	5.0E-80	AB037855.1	NT	Homo sapiens mRNA for KIAA1434 protein, partial cds
2764	12626	22518	1.13	5.0E-80	4504292	NT	Homo sapiens H3 histone family, member J (H3FJ) mRNA
3953	13861	23636	1.07	5.0E-80	AB019038.1	NT	Homo sapiens HMT-1 mRNA for beta-1,4 mannosyltransferase, complete cds
3953	13861	23637	1.07	5.0E-80	AB019038.1	NT	Homo sapiens HMT-1 mRNA for beta-1,4 mannosyltransferase, complete cds
4872	14752	24531	1.74	5.0E-80	AL163268.2	NT	Homo sapiens chromosome 21 segment HS21C068
6866	16745	26538	1.48	5.0E-80	9910293	NT	Mus musculus keratin complex 2, gene 6g (Krt2-5g), mRNA
7333	17237	27441	7.48	4.0E-80	F25915.1	EST_HUMAN	HSPD13155 HM3 Homo sapiens cDNA clone s4000045F03
210	10181		4.71	3.0E-80	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
4610	14498	24287	1.43	3.0E-80	BF085009.1	EST_HUMAN	PMO-GN0018-040900-002-E03 GN0018 Homo sapiens cDNA
4818	14701		4.97	3.0E-80	BE817465.1	EST_HUMAN	QV4-BND263-040600-241-g10 BND263 Homo sapiens cDNA
5554	15470	25541	2.05	3.0E-80	AI091675.1	EST_HUMAN	cc23e12.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:1567054 3' similar to TR:O35790 O35790 PIG-L ;
1757	11656	21527	6.39	2.0E-80	R35321.1	EST_HUMAN	y66a03.1 Soares infant brain 1NIB Homo sapiens cDNA clone IMAGE:38060 5'
1816	11713	21593	1.91	2.0E-80	AI444821.1	EST_HUMAN	RET4B7 subtracted retina cDNA library Homo sapiens cDNA clone RET4B7
2009	11901	21791	6.6	2.0E-80	AL043116.2	EST_HUMAN	DKFZp434D1323_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434D1323 5'
6132	15979	26115	1.58	2.0E-80	11421930	NT	Homo sapiens Gdgi transport complex protein (90 kDa) (GTC90), mRNA
8243	18123	28373	3.06	2.0E-80	AA393362.1	EST_HUMAN	z170f12.r1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:727727 5' similar to TR:G191315
337	10296		1.82	1.0E-80	AL163303.2	NT	G191315 ANDROGEN-DEPENDENT EXPRESSED PROTEIN ;
782	10712	20551	1.12	1.0E-80	AF231920.1	NT	Homo sapiens chromosome 21 segment HS21C103
							Homo sapiens chromosome 21 unknown mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1911	11806		3.13	1.0E-80	AF732656.1	EST_HUMAN	nm01f12.x5 NCI_CGAP_Co9 Homo sapiens cDNA clone IMAGE:1076495 3' similar to contains OFR.11 OFR repetitive element
4358	14254	24039	0.96	1.0E-80	AF077188.1	NT	Homo sapiens cullin 4A (CUL4A) mRNA, complete cds
5192	15055	24819	0.97	1.0E-80	AL163278.2	NT	Homo sapiens chromosome 21 segment HS21C078
5265	15187		5.63	1.0E-80	BE386615.1	EST_HUMAN	601274305F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3615433 5'
5833	15547	25635	6.41	1.0E-80	L10347.1	NT	Human pro-alpha1 type II collagen (COL2A1) gene exons 1-54, complete cds
5916	15822	25947	1.6	1.0E-80	5174540	NT	Homo sapiens malate dehydrogenase 2, NAD (mitochondrial) (MDH2), nuclear gene encoding mitochondrial protein, mRNA
6470	16329	26496	2.68	1.0E-80	A1948731.1	EST_HUMAN	wq25c05.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2472296 3'
6470	16329	26497	2.68	1.0E-80	A1948731.1	EST_HUMAN	wq25c05.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2472296 3'
7350	17218	27417	1.23	1.0E-80	AF245219.1	NT	Homo sapiens probable mannose binding C-type lectin DC-SIGNR mRNA, complete cds
7350	17218	27418	1.23	1.0E-80	AF245219.1	NT	Homo sapiens probable mannose binding C-type lectin DC-SIGNR mRNA, complete cds
7957	17807	28049	1.19	1.0E-80	D63479.2	NT	Homo sapiens mRNA for KIAA0145 protein, partial cds
8044	17935	28183	7.42	1.0E-80	11641276	NT	Homo sapiens similar to rat myomegalin (LOC64182), mRNA
8044	17935	28184	7.42	1.0E-80	11641276	NT	Homo sapiens similar to rat myomegalin (LOC64182), mRNA
9443	19079	25281	1.45	1.0E-80	11417901	NT	Homo sapiens meningioma (disrupted in balanced translocation) 1 (MN1), mRNA
9643	19211	25258	1.86	1.0E-80	AB020640.1	NT	Homo sapiens mRNA for KIAA0833 protein, partial cds
9670	19229		1.99	1.0E-80	AB011399.1	NT	Homo sapiens gene for AF-6, complete cds
8071	17962	28212	2.33	8.0E-81	AI251752.1	EST_HUMAN	qh90g05.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1854296 3'
8071	17962	28213	2.33	8.0E-81	AI251752.1	EST_HUMAN	qh90g05.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1854296 3'
8494	18367	28631	4.95	8.0E-81	BE394525.1	EST_HUMAN	601310531F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3632070 5'
6300	16164	26321	3.06	7.0E-81	AB221115.1	EST_HUMAN	za91cd08.x5 Soares_fetal_lung_NBHL19W Homo sapiens cDNA clone IMAGE:299918 3'
4290	14188	23971	4.84	6.0E-81	BE256829.1	EST_HUMAN	601111970F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3352840 5'
4290	14188	23972	4.84	6.0E-81	BE256829.1	EST_HUMAN	601111970F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3352840 5'
5229	15153	24920	1.93	6.0E-81	4501848	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 3 (ABCA3), mRNA
5229	15153	24921	1.93	6.0E-81	4501848	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 3 (ABCA3), mRNA
7325	17201	27401	1.34	6.0E-81	AA360017.1	EST_HUMAN	EST69129 Fetal lung II Homo sapiens cDNA 5' end
9579	19166	25269	1.82	6.0E-81	BF679022.1	EST_HUMAN	602153666F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4294601 5'
9579	19166	25270	1.82	6.0E-81	BF679022.1	EST_HUMAN	602153666F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4294601 5'
2170	12057	21960	3.14	5.0E-81	BE268042.1	EST_HUMAN	601125505F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3345480 5'
6901	16780	26974	3.47	5.0E-81	AB007923.1	NT	Homo sapiens mRNA for KIAA0454 protein, partial cds
6901	16790	26975	3.47	5.0E-81	AB007923.1	NT	Homo sapiens mRNA for KIAA0454 protein, partial cds
8865	18677	28966	2.51	5.0E-81	9506634	NT	Homo sapiens hypothetical protein (FLJ11045), mRNA
214	10165	19988	0.87	4.0E-81	AF252257.1	NT	Homo sapiens CRP2 binding protein mRNA, partial cds

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1779	11678	21556	0.99	4.0E-81	AW779612.1	EST_HUMAN	In98d02.x1 NCL_CGAP_Co14 Homo sapiens cDNA clone IMAGE:3035907 3' similar to SW:COPG_BOVIN
3134	13059	22858	3.79	4.0E-81	AB037766.1	NT	P53620 COATOMER GAMMA SUBUNIT ; Homo sapiens mRNA for KIAA1345 protein, partial cds
3576	13490	23280	1.18	4.0E-81	AW004608.1	EST_HUMAN	ws90h03.x1 NCL_CGAP_Co3 Homo sapiens cDNA clone IMAGE:2505269 3' similar to TR:O43815 O43815
4068	13970	23746	2.14	4.0E-81	AF263306.1	NT	STRIATIN ; Homo sapiens rab3 interacting protein variant 2 mRNA, partial cds
4068	13970	23747	2.14	4.0E-81	AF263306.1	NT	Homo sapiens rab3 interacting protein variant 2 mRNA, partial cds
6821	16700	26893	2.15	4.0E-81	X06939.1	NT	Human mRNA for amyloid A4(751) protein
6973	16850	27041	3.4	4.0E-81	U20197.1	NT	Human cone photoreceptor cGMP-phosphodiesterase alpha' subunit gene, exons 2 and 3
6973	16850	27042	3.4	4.0E-81	U20197.1	NT	Human cone photoreceptor cGMP-phosphodiesterase alpha' subunit gene, exons 2 and 3
7320	17196	27396	5.65	4.0E-81	AB018001.1	NT	Homo sapiens mRNA for Death-associated protein kinase 2, complete cds
7816	17666	27906	1.49	4.0E-81	11425281	NT	Homo sapiens ligase I, DNA, ATP-dependent (LIG1), mRNA
8522	18394	28658	2.24	4.0E-81	4759085	NT	Homo sapiens vesicle trafficking protein sec22b (SEC22B), mRNA
8522	18394	28659	2.24	4.0E-81	4759085	NT	Homo sapiens vesicle trafficking protein sec22b (SEC22B), mRNA
9069	19627	25007	3.81	4.0E-81	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
9069	19627	25008	3.81	4.0E-81	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
9612	19191	25253	2.52	4.0E-81	11417871	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
9612	19191	25254	2.52	4.0E-81	11417871	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
9750	19275	25228	2.57	4.0E-81	11417974	NT	Homo sapiens beta-ureidopropionase (LOC51733), mRNA
1246	11153	21000	9.36	3.0E-81	Y18000.1	NT	Homo sapiens transcobalamin II; macrocytic anemia (TCN2), mRNA
1246	11153	21001	9.36	3.0E-81	Y18000.1	NT	Homo sapiens NF2 gene
2320	12201	22100	1.7	3.0E-81	AF077188.1	NT	Homo sapiens NF2 gene
2961	12888	22685	5.12	3.0E-81	4506280	NT	Homo sapiens cullin 4A (CUL4A), mRNA, complete cds
2961	12888	22686	5.12	3.0E-81	4506280	NT	Homo sapiens pleiotrophin (heparin binding growth factor 8, neurite growth-promoting factor 1) (PTN), mRNA
4933	14811		0.87	3.0E-81	AL163263.2	NT	Homo sapiens pleiotrophin (heparin binding growth factor 8, neurite growth-promoting factor 1) (PTN), mRNA
2802	12732	22530	1.77	2.0E-81	BE764636.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C083
2802	12732	22531	1.77	2.0E-81	BE764636.1	EST_HUMAN	601474072F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3877121 5'
3707	13620	23404	0.98	2.0E-81	AW611542.1	EST_HUMAN	601474072F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3877121 5'
4579	14469	24256	0.85	2.0E-81	5453871	NT	hg85c01.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2952384 3'
9888	13620	23404	1.74	2.0E-81	AW611542.1	EST_HUMAN	Homo sapiens platelet-derived growth factor receptor-like (PDGFR) mRNA
9898	19375	25194	1.35	2.0E-81	8567387	NT	hg85c01.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2952384 3'
1403	11308	21189	3.32	1.0E-81	W26539.1	EST_HUMAN	Homo sapiens period (Drosophila) homolog 3 (PER3), mRNA
							3333 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3602	13516	23304	2	1.0E-81	AW960658.1	EST_HUMAN	EST372729 IMAGE resequencing, MAGF Homo sapiens cDNA
4414	14308	24091	3.07	1.0E-81	AA040370.1	EST_HUMAN	z45h09.r1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:485825 5' similar to PIR.S62437 S62437 CDP-diacylglycerol synthase - fruit fly ;
4546	14439	24222	7.85	1.0E-81	BE047896.1	EST_HUMAN	tz45c04.y1 NCI_CGAP_Brn52 Homo sapiens cDNA clone IMAGE:2291526 5'
5203	15083	29103	9.03	1.0E-81	U87928.1	NT	Human aconitate hydratase (ACO2) gene, exon 3
5284	15206	24982	4.01	1.0E-81	11432966	NT	Homo sapiens polymerase (DNA directed), gamma (POLG), mRNA
5284	15206	24983	4.01	1.0E-81	11432966	NT	Homo sapiens polymerase (DNA directed), gamma (POLG), mRNA
5468	15388	25449	3.54	1.0E-81	U52351.1	NT	Homo sapiens arm-repeat protein NPRAP/neurojuncin (CTNND2) mRNA, partial cds
5468	15388	25450	3.54	1.0E-81	U52351.1	NT	Homo sapiens arm-repeat protein NPRAP/neurojuncin (CTNND2) mRNA, partial cds
5737	15645	25750	3.15	1.0E-81	BF674641.1	EST_HUMAN	602137864F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4274635 5'
6567	16425	26506	6.4	1.0E-81	11432966	NT	Homo sapiens polymerase (DNA directed), gamma (POLG), mRNA
7631	17482	27702	2.62	1.0E-81	BE958278.1	EST_HUMAN	601645051F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:3930228 5'
7631	17482	27703	2.62	1.0E-81	BE958278.1	EST_HUMAN	601645051F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:3930228 5'
7726	17576	27799	4.81	1.0E-81	BE564367.1	EST_HUMAN	601343180F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3685483 5'
7819	17669	27909	2.93	1.0E-81	BE744545.1	EST_HUMAN	601577339F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3838280 5'
7819	17669	27910	2.93	1.0E-81	BE744545.1	EST_HUMAN	601577339F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3838280 5'
8000	17850	28091	1.46	1.0E-81	AW997550.1	EST_HUMAN	CN3-NN0059-140400-147-a12 NN0059 Homo sapiens cDNA
8438	18312	28568	1.96	1.0E-81	AW844986.1	EST_HUMAN	MR0-C10006-250599-019 CT0006 Homo sapiens cDNA
8438	18312	28569	1.96	1.0E-81	AW844986.1	EST_HUMAN	MR0-C10006-250599-019 CT0006 Homo sapiens cDNA
8594	13516	23304	2.42	1.0E-81	AW960658.1	EST_HUMAN	EST372729 IMAGE resequencing, MAGF Homo sapiens cDNA
8810	18624	28915	1.96	1.0E-81	BF204253.1	EST_HUMAN	601867714F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4110459 5'
9278	18981	25325	3.62	1.0E-81	11418138	NT	Homo sapiens phorbol (similar to apolipoprotein B mRNA editing protein) (DJ742C19.2), mRNA
12	9998	19789	1.87	8.0E-82	AF161406.1	NT	Homo sapiens HSPC288 mRNA, partial cds
101	9998	19789	1.26	8.0E-82	AF161406.1	NT	Homo sapiens HSPC288 mRNA, partial cds
263	10228	20044	1.66	8.0E-82	U08988.1	NT	Human CRFB4 gene, partial cds
797	10726	20566	2.17	8.0E-82	U08988.1	NT	Human CRFB4 gene, partial cds
869	10795	20645	1.11	8.0E-82	U08988.1	NT	Human CRFB4 gene, partial cds
1475	11380	21244	1.12	8.0E-82	AB037748.1	NT	Homo sapiens mRNA for KIAA1327 protein, partial cds
1636	11540	21400	1.24	8.0E-82	6715601	NT	Homo sapiens glutathione peroxidase 5 (epididymal androgen-related protein) (GPX5), transcript variant 2, mRNA
4150	14050	23825	0.81	8.0E-82	8923432	NT	Homo sapiens hypothetical protein FLJ20461 (FLJ20461), mRNA
1434	11339			7.0E-82	BF035327.1	EST_HUMAN	601458631F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3882086 5'
2739	12801	22495	1.82	7.0E-82	AJ144050.1	EST_HUMAN	AJ144050 HEMBA1 Homo sapiens cDNA clone HEMBA1000752 3'
4034	13937	23713	0.81	5.0E-82	AA515512.1	EST_HUMAN	nt69et11.s1 NCI_CGAP_Co3 Homo sapiens cDNA clone IMAGE:925196 3'

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Table 4
Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1647	11551	21412	6.51	4.0E-82	AF081484.1	NT	Homo sapiens alpha-tubulin isoform 1 mRNA, complete cds
8954	18761	29054	6.47	4.0E-82	AI037300.1	EST_HUMAN	wp75e09.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2467624 3' similar to TR:O75276
9519	19130		6.19	4.0E-82	AF029701.2	NT	O75276 PKD1 ;
							Homo sapiens presenilin-1 gene, exons 1 and 2
276	10242	20061	13.75	3.0E-82	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
687	10620	20446	2.19	3.0E-82	BE005705.1	EST_HUMAN	RC2-BN0120-070400-013-f02 BN0120 Homo sapiens cDNA
770	10700	20539	4.44	3.0E-82	5174702	NT	Homo sapiens transforming growth factor beta-activated kinase-binding protein 1 (TAB1), mRNA
852	10779	20629	3.22	3.0E-82	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
1045	10963		13.76	3.0E-82	AA728848.1	EST_HUMAN	a23e05.s1 Soares_testis_NHT Homo sapiens cDNA clone 1343648 3'
1333	11240	21098	5.47	3.0E-82	AW875073.1	EST_HUMAN	RC6-PT0001-190100-021-B02 PT0001 Homo sapiens cDNA
1450	11355	21219	2.03	3.0E-82	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21 C085
1859	11755	21630	1.82	3.0E-82	BE813232.1	EST_HUMAN	RC1-BN0005-280700-018-g04 BN0005 Homo sapiens cDNA
1961	11855	21744	0.9	3.0E-82	4501922	NT	Homo sapiens adenylate cyclase activating polypeptide 1 (pituitary) receptor type I (ADCYAP1R1) mRNA
3234	13158		2.06	3.0E-82	5453811	NT	Homo sapiens neurotrophic tyrosine kinase receptor, type 2 (NTRK2) mRNA
4836	14718	24501	0.91	3.0E-82	AA135979.1	EST_HUMAN	zn93b04.r1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone IMAGE:565711 5' similar to SW:PAGT_BOVIN_Q07537 POLYPEPTIDE N-ACETYL GALACTOSAMINYL TRANSFERASE ;
6735	16617	26807	2.84	3.0E-82	11425206	NT	Homo sapiens arkyrin-like with transmembrane domains 1 (ANKTM1), mRNA
7654	17504	27728	3.79	3.0E-82	AB029000.1	NT	Homo sapiens mRNA for KIAA1077 protein, partial cds
7654	17504	27729	3.79	3.0E-82	AB029000.1	NT	Homo sapiens mRNA for KIAA1077 protein, partial cds
582	10520	20326	1.92	2.0E-82	AB023216.1	NT	Homo sapiens mRNA for KIAA0999 protein, partial cds
582	10520	20327	1.92	2.0E-82	AB023216.1	NT	Homo sapiens mRNA for KIAA0999 protein, partial cds
1680	11862	21428	1.75	2.0E-82	AL046390.1	EST_HUMAN	DKFZp434M117_r1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434M117 5'
3772	13684	23466	1.14	2.0E-82	DB7675.1	NT	Homo sapiens DNA for anyloid precursor protein, complete cds
4140	14040	23815	1.14	2.0E-82	4504116	NT	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
4458	14352	24143	0.98	2.0E-82	AB029019.1	NT	Homo sapiens mRNA for KIAA1096 protein, partial cds
4458	14352	24144	0.98	2.0E-82	AB029019.1	NT	Homo sapiens mRNA for KIAA1096 protein, partial cds
4768	14653	24441	3.18	2.0E-82	AF045555.1	NT	Homo sapiens wbscr1 (WBSOR1) and wbscr5 (WBSOR5) genes, complete cds, alternatively spliced and replication factor C subunit 2 (RFC2) gene, complete cds
5013	14887	24653	1.66	2.0E-82	4507580	NT	Homo sapiens tumor necrosis factor receptor superfamily, member 5 (TNFRSF5) mRNA
5013	14887	24654	1.66	2.0E-82	4507580	NT	Homo sapiens tumor necrosis factor receptor superfamily, member 5 (TNFRSF5) mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5358	15278	25108	2.37	2.0E-82	AB018270.1	NT	Homo sapiens mRNA for KIAA0727 protein, partial cds
5746	15654	25762	4.96	2.0E-82	AF234882.1	NT	Homo sapiens FAM4A1 splice variant a (FAM4A1) mRNA, complete cds
6834	16713	26906	2.23	2.0E-82	11321570	NT	Homo sapiens slit (Drosophila) homolog 3 (SLIT3), mRNA
7821	17671	27912	1.2	2.0E-82	Y08032.1	NT	Human endogenous retrovirus-K, LTR U5 and gag gene
7821	17671	27913	1.2	2.0E-82	Y08032.1	NT	Human endogenous retrovirus-K, LTR U5 and gag gene
8628	18493	28766	6.98	2.0E-82	U0736.1	NT	Homo sapiens CAGF9 mRNA, partial cds
8628	18493	28767	6.98	2.0E-82	U0736.1	NT	Homo sapiens CAGF9 mRNA, partial cds
9097	18668		2.23	2.0E-82	N94950.1	EST_HUMAN	zb31d10.s1 Soares_papillary thyroid tumor_Nb-HPA Homo sapiens cDNA clone IMAGE:305203 3'
9932	19205		2.57	2.0E-82	AA011278.1	EST_HUMAN	201g09.r1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:429568 5'
9932	19205		1.44	2.0E-82	11418097	NT	Homo sapiens SRY (sex determining region Y)-box 10 (SOX10), mRNA
577	10515	20321	1.45	1.0E-82	11545921	NT	Homo sapiens melanoma differentiation associated protein-5 (MDA5), mRNA
1190	11100		0.9	1.0E-82	BE885106.1	EST_HUMAN	601510859F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3912207 5'
1264	11171	21020	1.91	1.0E-82	BE064386.1	EST_HUMAN	RC4-BT0310-110300-015-f10 BT0310 Homo sapiens cDNA
1265	11172	21021	0.83	1.0E-82	AB011110.2	NT	Homo sapiens mRNA for KIAA0538 protein, partial cds
7882	17732		1.38	1.0E-82	BF515938.1	EST_HUMAN	U1-H-BW1-aaa-f03-0-U1.s1 NCI_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3084063 3'
8128	18016	28264	2.57	1.0E-82	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
8373	18250	28500	1.76	1.0E-82	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
7057	16934	27124	4.7	9.0E-83	BF672220.1	EST_HUMAN	802150403F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4291561 5'
1392	11297	21155	1.88	8.0E-83	BE383973.1	EST_HUMAN	601273346F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3614362 5'
1656	12647	21422	1.96	8.0E-83	N66951.1	EST_HUMAN	za48f12.s1 Soares_fetal_liver_spleen_1NFLS Homo sapiens cDNA clone IMAGE:295823 3'
2836	12764		1.64	7.0E-83	AA584655.1	EST_HUMAN	no12h01.s1 NCI_CGAP_Phe1 Homo sapiens cDNA clone IMAGE:1100497 3' similar to contains Alu repetitive element;
4710	14596		5.49	7.0E-83	BF221813.1	EST_HUMAN	7p37a07.x1 NCI_CGAP_Pr28 Homo sapiens cDNA clone IMAGE:3647893 3' similar to TR:Q9Y316 Q9Y316
397	10343	20169	1.34	6.0E-83	M33320.1	NT	DJ207H1.1 ; Human platelet Glycoprotein IIb (GPIIb) gene, exons 2-29
1747	11647	21515	1.5	6.0E-83	AW673088.1	EST_HUMAN	h31h03.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2933525 3' similar to
2984	12912	22709	1.09	6.0E-83	AW816405.1	EST_HUMAN	SW:YBEB_HAEIN_P44471 HYPOTHETICAL PROTEIN H10034. ;
3031	12959	22751	0.94	6.0E-83	AA701457.1	EST_HUMAN	QV4-ST0234-181199-037-f05 ST0234 Homo sapiens cDNA
3515	13431	28231	0.95	6.0E-83	11430241	NT	259c05.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:435080 3'
5236	15160	24928	1.72	6.0E-83	4507866	NT	Homo sapiens hypothetical protein FLJ10379 (FLJ10379), mRNA
5669	15579	25679	2.13	6.0E-83	AJ010770.1	NT	Homo sapiens VAMP (vesicle-associated membrane protein)-associated protein A (33kD) (VAPA) mRNA, and translated products
6430	16291	26452	1.79	6.0E-83	11422024	NT	Homo sapiens met proto-oncogene (hepatocyte growth factor receptor) (MET), mRNA

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7579	17430	27644	6.77	6.0E-83	4505314	NT	Homo sapiens myomesin (M-protein) 2 (165kd) (MYOM2), mRNA
8817	18630		6.32	6.0E-83	AA486105.1	EST_HUMAN	ab14e10.s1 Stratagene lung (#937210) Homo sapiens cDNA clone IMAGE:840810 3' similar to contains THR.t2 THR repetitive element ;
9050	18634		3.11	6.0E-83	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
931	10856		4.14	5.0E-83	U17883.1	NT	Human succinate dehydrogenase iron-protein subunit (sdhB) gene, exon 5
2004	12649		2.1	5.0E-83	AF006305.1	NT	Homo sapiens 26S proteasome regulatory subunit (SUG2) mRNA, complete cds
3586	13500	23289	0.92	5.0E-83	AL133207.2	NT	Novel human gene mapping to chromosome X
5011	14885	24551	10.99	5.0E-83	4557013	NT	Homo sapiens catalase (CAT) mRNA
5011	14885	24552	10.99	5.0E-83	4557013	NT	Homo sapiens catalase (CAT) mRNA
5094	14964	24739	0.86	5.0E-83	AF083827.1	NT	Homo sapiens dihydropyridine receptor alpha 2 subunit (CACNA2D1) gene, exon 11
624	10561	20373	1.47	4.0E-83	AF224669.1	NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
3469	13385	28190	0.96	4.0E-83	BE88078.1	EST_HUMAN	601511580F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913195 5'
981	10904		4.5	3.0E-83	AA368311.1	EST_HUMAN	EST79542 Placenta 1 Homo sapiens cDNA similar to similar to endogenous retrovirus ERV9
2750	12612		1.82	3.0E-83	AA632854.1	EST_HUMAN	np87c07.s1 NCJ_CGAP_Thy1 Homo sapiens cDNA clone IMAGE:1133292 similar to contains THR.t2 THR repetitive element ;
1759	11658	21529	1.9	2.0E-83	AA993492.1	EST_HUMAN	o64g05.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1621592 3' similar to TR:Q92614 Q92614 MYELOBLAST KIAA0216. ;
1759	11658	21530	1.9	2.0E-83	AA993492.1	EST_HUMAN	o64g05.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1621592 3' similar to TR:Q92614 Q92614 MYELOBLAST KIAA0216. ;
1883	11779	21654	2.23	2.0E-83	N66951.1	EST_HUMAN	za48f12.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:296923 3'
2821	12750	22542	1.11	2.0E-83	BE828694.1	EST_HUMAN	RC8-ET0046-280800-013-H12 ET0046 Homo sapiens cDNA
3231	13155		1.82	2.0E-83	11430834	NT	Homo sapiens eal (Drosophila)-like 1 (SALL1), mRNA
3708	13621		1	2.0E-83	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
4241	14140	23915	4.47	2.0E-83	AF202879.1	NT	Homo sapiens hematopoietic progenitor cell antigen CD34 precursor (CD34) mRNA, partial cds
4553	14446	24230	8.13	2.0E-83	7706398	NT	Homo sapiens ankyrin repeat-containing protein ASB-2 (LOC51676), mRNA
4553	14446	24231	8.13	2.0E-83	7706398	NT	Homo sapiens ankyrin repeat-containing protein ASB-2 (LOC51676), mRNA
5359	15279	25109	23.35	2.0E-83	11024711	NT	Homo sapiens myosin, heavy polypeptide 4, skeletal muscle (MYH4), mRNA
5359	15279	25110	23.35	2.0E-83	11024711	NT	Homo sapiens myosin, heavy polypeptide 4, skeletal muscle (MYH4), mRNA
6396	16258	26419	5.9	2.0E-83	AF129533.1	NT	Homo sapiens F-box protein Fbl3b (FBL3B) mRNA, partial cds
6659	16539	26736	1.52	2.0E-83	U66707.1	NT	Rattus norvegicus densin-180 mRNA, complete cds
6839	16718	26911	2.56	2.0E-83	AF011920.1	NT	Homo sapiens protein kinase CK2 catalytic subunit alpha gene, exon 1
6839	16718	26912	2.56	2.0E-83	AF011920.1	NT	Homo sapiens protein kinase CK2 catalytic subunit alpha gene, exon 1

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7767	17617	27845	3.32	2.0E-83	M22094.1	NT	Human neural cell adhesion molecule (N-CAM) secreted isoform mRNA, 3' end
7767	17617	27846	3.32	2.0E-83	M22094.1	NT	Human neural cell adhesion molecule (N-CAM) secreted isoform mRNA, 3' end
7826	17676	27920	1.21	2.0E-83	AU117659.1	EST_HUMAN	AU117659 HEMBA1 Homo sapiens cDNA clone HEMBA1001910 5'
8223	18105	28358	3.7	2.0E-83	U14364.8	NT	Homo sapiens KIAA0985 protein (KIAA0985), mRNA
8298	18177	28422	1.82	2.0E-83	AL134452.1	EST_HUMAN	DKFZp547J135_r1 547 (synonym: hibr1) Homo sapiens cDNA clone DKFZp547J135 5'
8298	18177	28423	1.82	2.0E-83	AL134452.1	EST_HUMAN	DKFZp547J135_r1 547 (synonym: hibr1) Homo sapiens cDNA clone DKFZp547J135 5'
9667	19226		3.48	2.0E-83	AB011399.1	NT	Homo sapiens gene for AF-6, complete cds
1390	11295	21152	16.57	1.0E-83	4504326	NT	Homo sapiens hydroxyacyl-Coenzyme A dehydrogenase/3-ketoacyl-Coenzyme A thiolase/eryl-Coenzyme A hydratase (trifunctional protein), beta subunit (HADHB) mRNA
1390	11295	21153	16.57	1.0E-83	4504326	NT	Homo sapiens hydroxyacyl-Coenzyme A dehydrogenase/3-ketoacyl-Coenzyme A thiolase/eryl-Coenzyme A hydratase (trifunctional protein), beta subunit (HADHB) mRNA
2620	12488	22378	1.6	1.0E-83	BE883690.1	EST_HUMAN	601507375F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3908754 5'
3146	13071	22872	0.84	1.0E-83	7662349	NT	Homo sapiens cell recognition molecule Casp2 (KIAA0868), mRNA
3793	13705	23491	3.55	1.0E-83	AF053768.1	NT	Rattus norvegicus brain specific cortactin-binding protein CBP90 mRNA, partial cds
4151	14051	23826	2.22	1.0E-83	Z25822.1	NT	H. sapiens gene for mitochondrial dodecenoyl-CoA delta-isomerase, exon 3
4789	14674	24461	1.36	1.0E-83	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
6022	15926	26057	1.75	1.0E-83	AI027614.1	EST_HUMAN	ov99b08.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1645431 3' similar to gb:M64241 QM
3727	13639	23425	2.82	7.0E-84	BE901209.1	EST_HUMAN	PROTEIN (HUMAN);
1273	11180	21028	4.21	6.0E-84	BE838864.1	EST_HUMAN	601676023F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3968853 5'
1273	11180	21029	4.21	6.0E-84	BE838864.1	EST_HUMAN	RC2-FN0119-200600-011-g05 FN0119 Homo sapiens cDNA
2348	12228	22125	4.76	6.0E-84	AA776574.1	EST_HUMAN	RC2-FN0119-200600-011-g05 FN0119 Homo sapiens cDNA
5206	15085		6.24	6.0E-84	AL042863.2	EST_HUMAN	ae86a03.s1 Stratagene schizo brain S11 Homo sapiens cDNA clone IMAGE:971020 3'
5388	15307	25160	1.7	6.0E-84	AA897339.1	EST_HUMAN	DKFZp434H0322_r1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434H0322 5'
8415	16277	26440	3.17	6.0E-84	BE810371.1	EST_HUMAN	al47g03.s1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1460500 3' similar to gb:M14338
6706	16586	26774	1.9	6.0E-84	BE770199.1	EST_HUMAN	VITAMIN K-DEPENDENT PROTEIN S PRECURSOR (HUMAN);
8821	18634		1.94	6.0E-84	AW369812.1	EST_HUMAN	PM0-LT0019-190600-004-F02 LT0019 Homo sapiens cDNA
897	10630	20456	1.06	5.0E-84	AA382811.1	EST_HUMAN	PM4-F10054-160600-004-e10 F10054 Homo sapiens cDNA
2981	12908		1.01	5.0E-84	AF109718.1	NT	IL0-BT0168-091199-139-e06 BT0168 Homo sapiens cDNA
8830	18643	28926	2.76	5.0E-84	11428740	NT	EST196094 Testis 1 Homo sapiens cDNA 5' end
1354	11260	21116	1.08	4.0E-84	AB037735.1	NT	Homo sapiens chromosome 3 subtelomeric region
							Homo sapiens regulatory factor X, 3 (influences HLA class II expression) (RX3), mRNA
							Homo sapiens mRNA for KIAA1314 protein, partial cds

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1389	11294	21151	4.03	4.0E-84	AI685321.1	EST_HUMAN	wa76c04.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2302086 3' similar to
4869	14749	24529	1.76	4.0E-84	AF069801.2	NT	SW:NRDC_HUMAN_O43847 NARDILYSIN PRECURSOR ;
5060	14930	24701	1.27	4.0E-84	U94982.1	NT	Homo sapiens myosin light chain kinase isoform 2 (MLCK) mRNA, complete cds
5416	15336	25388	1.31	4.0E-84	11386168	NT	Human 2,4-dienoyl-CoA reductase gene, exons 3 and 4
5416	15336	25389	1.31	4.0E-84	11386168	NT	Homo sapiens protein tyrosine phosphatase, receptor type, G (PTPRG), mRNA
5791	15697	25805	2.35	4.0E-84	AF059650.1	NT	Homo sapiens protein tyrosine phosphatase, receptor type, G (PTPRG), mRNA
6507	16366	26543	12.15	4.0E-84	11421326	NT	Homo sapiens histone deacetylase 3 (HDAC3) gene, complete cds
8290	18169	28413	6.56	4.0E-84	AB032956.1	NT	Homo sapiens KIAA0783 gene product (KIAA0783), mRNA
313	10275	20094	1.36	3.0E-84	AF026200.1	NT	Homo sapiens mRNA for KIAA1130 protein, partial cds
1137	11051	20891	0.89	3.0E-84	4758081	NT	Homo sapiens Bach1 protein homolog mRNA, partial cds
1917	11812	21690	1.15	3.0E-84	5453855	NT	Homo sapiens chondroitin sulfate proteoglycan 2 (versican) (OSPG2) mRNA
1962	11856	21745	3.03	3.0E-84	AL099880.1	NT	Homo sapiens pericentriolar material 1 (PCM1) mRNA
3542	13458	23251	1.18	3.0E-84	AB026898.1	NT	Novel human mRNA containing Zinc finger C2H2 type domains
3689	13602	23389	4.11	3.0E-84	AF014459.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
8253	18133		7.8	3.0E-84	AI983801.1	EST_HUMAN	Homo sapiens X-linked juvenile retinoschisis precursor protein (XLRSP1) mRNA, complete cds
2058	11948	21845	5.89	2.0E-84	BE695397.1	EST_HUMAN	wu20d05.x1 Soares_Dieckgraefe_colon_NHCD Homo sapiens cDNA clone IMAGE:2520585 3' similar to
2058	11948	21846	5.89	2.0E-84	BE695397.1	EST_HUMAN	gblL05093 60S RIBOSOMAL PROTEIN L18A (HUMAN);
2913	12840	22640	9.55	2.0E-84	AF035943.1	NT	CM1-BT0795-190600-272-b08 BT0795 Homo sapiens cDNA
2932	12859	22659	0.93	2.0E-84	X89211.1	NT	CM1-BT0795-190600-272-b08 BT0795 Homo sapiens cDNA
4682	14668	24364	1.11	2.0E-84	BF309518.1	EST_HUMAN	Homo sapiens myelin transcription factor 1-like (MYT1L) mRNA, complete cds
4682	14668	24365	1.11	2.0E-84	BF309518.1	EST_HUMAN	H.sapiens DNA for endogenous retroviral like element
6695	16575		1.67	2.0E-84	AI298674.1	EST_HUMAN	601887664F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4121727 5'
9308	19003	25334	1.89	2.0E-84	BF448000.1	EST_HUMAN	601887664F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4121727 5'
9308	19003	25335	1.89	2.0E-84	BF448000.1	EST_HUMAN	601887664F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4121727 5'
309	10271	20090	1.53	1.0E-84	AF114488.1	NT	qm87c09.x1 NCJ_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1896728 3'
537	10478	20290	5.2	1.0E-84		NT	nae30a02.x1 Lupski_sympathetic_trunk Homo sapiens cDNA clone IMAGE:4090251 3' similar to
703	10636		0.99	1.0E-84		NT	TR:Q9UGS3 Q9UGS3 DJ756G23.1 ;
1271	11178	21026	1.92	1.0E-84	AA984379.1	EST_HUMAN	nae30a02.x1 Lupski_sympathetic_trunk Homo sapiens cDNA clone IMAGE:4090251 3' similar to
						NT	TR:Q9UGS3 Q9UGS3 DJ756G23.1 ;
						NT	Homo sapiens intersecin short isoform (ITSN) mRNA, complete cds
						NT	Homo sapiens tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, zeta polypeptide (YWHAZ) mRNA
						NT	Homo sapiens complement component 5 (C5), mRNA
						NT	Homo sapiens complement component 5 (C5), mRNA
						EST_HUMAN	am95b11.s1 Stratagene schizo brain S11 Homo sapiens cDNA clone IMAGE:1629885 3'

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2008	11900	21790	3.13	1.0E-84	BE392137.1	EST_HUMAN	601308008F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3626257 5'
2176	12063	21964	1.08	1.0E-84	11427197	NT	Homo sapiens pericentriolar material 1 (PCM1), mRNA
3691	13605	23391	2.14	1.0E-84	AA720851.1	EST_HUMAN	hw12a06.s1 NCL_CGAP_SS1 Homo sapiens cDNA clone IMAGE:1239108 3'
4319	14216	23998	5.59	1.0E-84	AJ229041.1	NT	Homo sapiens 959 kb config between AML1 and CBR1 on chromosome 21q22; segment 1/3
4601	14489	24275	3.82	1.0E-84	AL043314.2	EST_HUMAN	DKFZp434N0323_r1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434N0323 5'
4601	14489	24276	3.82	1.0E-84	AL043314.2	EST_HUMAN	DKFZp434N0323_r1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434N0323 5'
4823	14216	23998	4.29	1.0E-84	AJ229041.1	NT	Homo sapiens 959 kb config between AML1 and CBR1 on chromosome 21q22; segment 1/3
5757	15665	25773	1.52	1.0E-84	S73482.1	NT	uterine water channel=28 kda erythrocyte integral membrane protein homolog [human, uterus, mRNA, 1340 nt]
6113	16007	26143	1.49	1.0E-84	AL049784.1	NT	Novel human gene mapping to chromosome 13
6113	16007	26144	1.49	1.0E-84	AL049784.1	NT	Novel human gene mapping to chromosome 13
6220	16086	26236	1.96	1.0E-84	AL049784.1	NT	Novel human gene mapping to chromosome 13
6414	16276	26439	3.12	1.0E-84	8393594	NT	Homo sapiens polymerase (DNA directed), alpha (POLA), mRNA
6483	16324	26490	1.8	1.0E-84	11430846	NT	Homo sapiens NGF1A binding protein 1 (ERG1 binding protein 1) (NAB1), mRNA
7495	17365	26236	2.45	1.0E-84	5031984	NT	Homo sapiens nuclear transport factor 2 (placental protein 15) (PPI5), mRNA
7639	15001	24884	1.85	1.0E-84	4507848	NT	Homo sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13), mRNA
7639	15091	24885	1.85	1.0E-84	4507848	NT	Homo sapiens ubiquitin specific protease 13 (isopeptidase T-3) (USP13), mRNA
9190	18925	25330	2.98	1.0E-84	11417812	NT	Homo sapiens purinergic receptor P2X-like 1, orphan receptor (P2RXL1), mRNA
9298	18998	25330	9.8	1.0E-84	11418185	NT	Homo sapiens aconitase 2, mitochondrial (ACO2), mRNA
951	10875		1.17	9.0E-85	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
1057	10974	20816	2.3	9.0E-85	U51432.1	NT	Homo sapiens nuclear protein Skip mRNA, complete cds
1057	10974	20817	2.3	9.0E-85	U51432.1	NT	Homo sapiens nuclear protein Skip mRNA, complete cds
1560	11465	21322	1.07	9.0E-85	M33282.1	NT	Human plasminogen gene, exon 7
1560	11465	21323	1.07	9.0E-85	M33282.1	NT	Human plasminogen gene, exon 7
1651	11554	21417	4.93	9.0E-85	7657020	NT	Homo sapiens DKFZp434P211 protein (DKFZp434P211), mRNA
4158	14058	23832	0.94	9.0E-85	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
4778	14682	24449	1.14	9.0E-85	5901979	NT	Homo sapiens heat shock transcription factor 2 binding protein (HSF2BP), mRNA
4826	14707	24491	1.01	9.0E-85	AL163268.2	NT	Homo sapiens chromosome 21 segment HS21C068
9819	11554	21417	1.27	9.0E-85	7657020	NT	Homo sapiens DKFZp434P211 protein (DKFZp434P211), mRNA
1120	11035	20877	3.24	7.0E-85	L05094.1	NT	Homo sapiens ribosomal protein L27 mRNA, complete cds
8910	18718		5.81	7.0E-85	AF113210.1	NT	Homo sapiens MSTP030 mRNA, complete cds
8718	18535	28819	2.56	6.0E-85	11438573	NT	Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 10 (RNA helicase) (DDX10), mRNA

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Table 4
Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8718	18535	28920	2.56	6.0E-85	11438573	NT	Homo sapiens DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 10 (RNA helicase) (DDX10), mRNA
2285	12168	22066	1.21	5.0E-85	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
8462	18335	28568	1.9	5.0E-85	AF224669.1	NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
9886	18094		2.45	5.0E-85	AF211189.1	NT	Homo sapiens T-type calcium channel alpha1 subunit Alpha1L-a isoform (CACNA1L) mRNA, complete cds
5738	15646	25751	1.66	4.0E-85	BF677910.1	EST_HUMAN	602084730F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4249087 5'
5738	15646	25752	1.66	4.0E-85	BF677910.1	EST_HUMAN	602084730F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4249087 5'
8017	17867		1.68	4.0E-85	BE079263.1	EST_HUMAN	RC1-BT0623-120200-011-c07 BT0623 Homo sapiens cDNA
9237	19549		1.97	4.0E-85	Z18867.1	EST_HUMAN	HSDHEG03 Stralagene cDNA library Human heart, cat#936208 Homo sapiens cDNA clone HEGC03
1277	11185	21035	1.15	3.0E-85	AF096157.1	NT	Homo sapiens protein phosphatase 2A BR gamma subunit gene, exon 6
1741	11642	21509	3.37	3.0E-85	T97495.1	EST_HUMAN	ye53g09.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:121504 5'
4219	14117	23894	0.94	3.0E-85	BE267189.1	EST_HUMAN	601189704F2 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3533616 5'
4805	14689	24475	1.73	3.0E-85	11024695	NT	Homo sapiens F-box only protein 24 (FBXO24), mRNA
4805	14689	24476	1.73	3.0E-85	11024695	NT	Homo sapiens F-box only protein 24 (FBXO24), mRNA
4864	14744	24523	8.66	3.0E-85	AB046783.1	NT	Homo sapiens mRNA for KIAA1563 protein, partial cds
4883	14764	24540	0.94	3.0E-85	7363442	NT	Homo sapiens olfactory receptor, family 12, subfamily D, member 2 (OR12D2), mRNA
5729	15636	25739	6.94	3.0E-85	7662309	NT	Homo sapiens KIAA0793 gene product (KIAA0793), mRNA
5729	15636	25740	6.94	3.0E-85	7662309	NT	Homo sapiens KIAA0793 gene product (KIAA0793), mRNA
6152	16025		7.04	3.0E-85	AJ404468.1	NT	Homo sapiens mRNA for dynein heavy chain (DNAH9 gene)
6584	16474	26663	1.61	3.0E-85	U44953.1	NT	Homo sapiens DENN mRNA, complete cds
7190	17067	27256	4.06	3.0E-85	11430889	NT	Homo sapiens phospholipase C, epsilon (PLCE), mRNA
8796	18610	28901	2.28	3.0E-85	5031993	NT	Homo sapiens EGF-like repeats and discolidin I-like domains 3 (EDL3), mRNA
9788	19298		2.66	3.0E-85	11418177	NT	Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA
947	10871	20719	0.87	2.0E-85	7657265	NT	Homo sapiens KIAA0929 protein Mxx2 interacting nuclear target (MINT) homolog (KIAA0929), mRNA
1024	10942	20786	1.85	2.0E-85	AF248540.1	NT	Homo sapiens intersectin 2 (SH3D1B) mRNA, complete cds
1400	11305	21164	7.1	2.0E-85	5174775	NT	Homo sapiens apolipoprotein C-II (APOC2) mRNA
1400	11305	21165	7.1	2.0E-85	5174775	NT	Homo sapiens apolipoprotein C-II (APOC2) mRNA
2183	12070	21972	2.12	2.0E-85	U10525.1	NT	Human DNA polymerase beta gene, exons 12 and 13
2793	11222		4.24	2.0E-85	7657463	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
4239	14138	23913	5.42	2.0E-85	4505880	NT	Homo sapiens plasminogen (PLG) mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4822	14705	24489	1.3	2.0E-85	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
7341	17209	27408	1.29	2.0E-85	A1760820.1	EST_HUMAN	w167h08.x1 NCI_CGAP_K1d12 Homo sapiens cDNA clone IMAGE:2398431 3' similar to contains element
2241	12125		2.44	1.0E-85	BE794306.1	EST_HUMAN	MSR1 repetitive element;
2344	12224	22121	8.09	1.0E-85	BE618392.1	EST_HUMAN	G01591416F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3945818 5'
2344	12224	22122	8.09	1.0E-85	BE618392.1	EST_HUMAN	G01462817F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3868021 5'
7632	17483	27704	2.06	1.0E-85	BE287917.1	EST_HUMAN	G01462817F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3868021 5'
8296	18175	28419	2.56	1.0E-85	AA778785.1	EST_HUMAN	G01109738F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3350553 5'
8296	18175	28420	2.56	1.0E-85	AA778785.1	EST_HUMAN	Z4503.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:453245 3'
8365	18242	28492	2.28	1.0E-85	BF311552.1	EST_HUMAN	Z4503.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:453245 3'
8365	18242	28493	2.28	1.0E-85	BF311552.1	EST_HUMAN	G01897003F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4126440 5'
9194	19082	25283	2.7	1.0E-85	11417862	NT	G01897003F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4126440 5'
9448	19082	25283	3.43	1.0E-85	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
1410	11315		7.66	9.0E-86	BE274217.1	EST_HUMAN	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
220	10190	20001	1.3	7.0E-86	7662247	NT	G01120778F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2967690 5'
921	10845	20691	1.33	7.0E-86	AA860801.1	EST_HUMAN	Homo sapiens KIAA0680 gene product (KIAA0680), mRNA
921	10845	20692	1.33	7.0E-86	AA860801.1	EST_HUMAN	aj88f08.s1 Soares_parathyroid_tumor_NbHPA Homo sapiens cDNA clone IMAGE:1403559 3'
6164	15121	24865	6.91	7.0E-86	11421737	NT	aj88f08.s1 Soares_parathyroid_tumor_NbHPA Homo sapiens cDNA clone IMAGE:1403559 3'
7078	16955	27148	2.91	7.0E-86	L38557.1	NT	Homo sapiens Tax1 (human T-cell leukemia virus type I) binding protein 1 (TAX1BP1), mRNA
7593	17444		1.63	7.0E-86	5453997	NT	Homo sapiens galactose-6-phosphate epimerase (GALC) gene, exon 15
7624	17475	27896	2.35	7.0E-86	11526307	NT	Homo sapiens RAN binding protein 7 (RANBP7), mRNA
8329	18206	28455	2.15	7.0E-86	11417012	NT	Homo sapiens DiGeorge syndrome critical region gene 6 (DGCR6), mRNA
8329	18206	28456	2.15	7.0E-86	11417012	NT	Homo sapiens similar to transcription factor CA150 (H. sapiens) (LOC63170), mRNA
1272	11179	21027	9.33	6.0E-86	4505492	NT	Homo sapiens similar to transcription factor CA150 (H. sapiens) (LOC63170), mRNA
204	10175	19993	1.48	4.0E-86	BE547173.1	EST_HUMAN	Homo sapiens oxoglutarate dehydrogenase (lipoamide) (OGDH), mRNA
5677	15586	25886	10.18	4.0E-86	BE295843.1	EST_HUMAN	G01072594F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3458830 5'
8567	10175	19993	1.9	4.0E-86	BE547173.1	EST_HUMAN	G01170865F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3531953 5'
5435	15355	25411	6.02	3.0E-86	AW340946.1	EST_HUMAN	G01072594F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3458830 5'
7868	17718	27963	3.31	3.0E-86	BE886479.1	EST_HUMAN	xc28h12.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2871719 3'
7868	17718	27964	3.31	3.0E-86	BE886479.1	EST_HUMAN	G01508696F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3911303 5'
8734	17883	28125	9.01	3.0E-86	A1659240.1	EST_HUMAN	G01508696F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3911303 5'
9163	19560		2.02	3.0E-86	BE410354.1	EST_HUMAN	tu18b02.x1 NCI_CGAP_P128 Homo sapiens cDNA clone IMAGE:2251371 3'
266	10231	20046	1.33	2.0E-86	AA306264.1	EST_HUMAN	G01302333F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3636753 5'
408	10354		1.67	2.0E-86	AL163203.2	NT	EST177232 Jurkat T-cells VI Homo sapiens cDNA 5' end
							Homo sapiens chromosome 21 segment HS21C003

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1173	11085	20929	2.18	2.0E-86	N58977.1	EST_HUMAN	yz19a08.r1 Soares_multiple_sclerosis_2NblMSP Homo sapiens cDNA clone IMAGE:283478 5'
2144	12032	21030	2.37	2.0E-86	9635487	NT	Human endogenous retrovirus, complete genome
2222	12107	22011	1.12	2.0E-86	AB033103.1	NT	Homo sapiens mRNA for KIAA1277 protein, partial cds
3369	13288	23087	1.43	2.0E-86	AW966142.1	EST_HUMAN	EST378215 MAGE resequences, MAGI Homo sapiens cDNA
3686	13599	23385	2.16	2.0E-86	AF156776.1	NT	Homo sapiens lysophosphatidic acid acyltransferase-delta (LPAAT-delta) mRNA, complete cds
3686	13599	23386	2.16	2.0E-86	AF156776.1	NT	Homo sapiens lysophosphatidic acid acyltransferase-delta (LPAAT-delta) mRNA, complete cds
3954	13862		2.42	2.0E-86	AW151742.1	EST_HUMAN	hd87g08.x1 NCL_CGAP_GC6 Homo sapiens cDNA clone IMAGE:2916542 3'
4679	14565	24360	2.8	2.0E-86	AF056490.1	NT	Homo sapiens cAMP-specific phosphodiesterase 8A (PDE8A) mRNA, partial cds
5580	15495	25571	1.53	2.0E-86	Z10411.1	NT	H.sapiens mRNA encoding phospholipase c
5580	15495	25572	1.53	2.0E-86	Z10411.1	NT	H.sapiens mRNA encoding phospholipase c
6987	16864	27057	2.22	2.0E-86	11437135	NT	Homo sapiens butyrobetaine (gamma), 2-oxoglutarate dioxygenase (gamma-butyrobetaine hydroxylase) (BBOX), mRNA
6987	16864	27058	2.22	2.0E-86	11437135	NT	Homo sapiens butyrobetaine (gamma), 2-oxoglutarate dioxygenase (gamma-butyrobetaine hydroxylase) (BBOX), mRNA
7372	17241	27446	1.95	2.0E-86	11422084	NT	Homo sapiens chromosome segregation 1 (yeast homolog) ilke (OSE1L), mRNA
7969	17819	28061	2.69	2.0E-86	11545846	NT	Homo sapiens basic-helix-loop-helix-PAS protein (NPAS3), mRNA
7969	17819	28062	2.69	2.0E-86	11545846	NT	Homo sapiens basic-helix-loop-helix-PAS protein (NPAS3), mRNA
8276	18156	28397	1.83	2.0E-86	4759051	NT	Homo sapiens ribosomal protein S6 kinase, 90kD, polypeptide 5 (RPS6KA5) mRNA
9606	19187	25250	2.4	2.0E-86	11418189	NT	Homo sapiens thyroid autoantigen 70kD (Ku antigen) (G22P1), mRNA
9772	19290		1.81	2.0E-86	AB011399.1	NT	Homo sapiens gene for AF-6, complete cds
9955	19520	25139	1.47	2.0E-86	11417883	NT	Homo sapiens adrenergic, beta, receptor kinase 2 (ADRBK2), mRNA
1579	11483	21343	3.1	1.0E-86	4826855	NT	Homo sapiens NADH dehydrogenase (ubiquinone) Fe-S protein 1 (75kD) (NADH-coenzyme Q reductase) (NDUFS1) mRNA
3125	13050	22847	2.06	1.0E-86	5453649	NT	Homo sapiens fibulin 5 (FBLN5) mRNA
3197	13122	22927	2.42	1.0E-86	L20492.1	NT	Human gamma-glutamyl transpeptidase mRNA, complete cds
3256	13179	22977	1.32	1.0E-86	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
3256	13179	22978	1.32	1.0E-86	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
3864	13775	23568	11.48	1.0E-86	7706161	NT	Homo sapiens chromosome 21 segment HS21C100
3864	13775	23569	11.48	1.0E-86	7706161	NT	Homo sapiens chromosome 21 segment HS21C100
4167	14067	23842	5.76	1.0E-86	AL163300.2	NT	Homo sapiens FK506-binding protein FKBP23 isoform mRNA, complete cds
4832	14714	24497	1.11	1.0E-86	AF100751.1	NT	Homo sapiens chromosome 21 segment HS21C084
8882	15328	25378	2.15	1.0E-86	AL163284.2	NT	qb77c09.x1 Soares_fetal_heart_Nbl-H19W Homo sapiens cDNA clone IMAGE:1706128 3' similar to SW:K1CJ_MOUSE P02535 KERATIN, TYPE I CYTOSKELETAL 10 ;
5287	15209		1.47	9.0E-87	AI150703.1	EST_HUMAN	

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6403	16264	26424	2	9.0E-87	4757721	NT	Homo sapiens a disintegrin and metalloproteinase domain 22 (ADAM22), mRNA
6403	16264	26425	2	9.0E-87	4757721	NT	Homo sapiens a disintegrin and metalloproteinase domain 22 (ADAM22), mRNA
471	10414	20233	14.17	8.0E-87	X62245.1	NT	O. cuniculus mRNA for elongation factor 1 alpha
2250	12134	22031	2.74	7.0E-87	BF063211.1	EST_HUMAN	7n85f02.x1 NCL CGAP_Cot16 Homo sapiens cDNA clone IMAGE:3322779 3'
2250	12134	22032	2.74	7.0E-87	BF063211.1	EST_HUMAN	7n85f02.x1 NCL CGAP_Cot16 Homo sapiens cDNA clone IMAGE:3322779 3'
6763	16842	26829	2.67	7.0E-87	BF352776.1	EST_HUMAN	IL3-HT0619-060700-198-D10 HT0619 Homo sapiens cDNA
7794	17644	27877	3.38	7.0E-87	AL043314.2	EST_HUMAN	DKFZp434N0323_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434N0323 5'
7794	17644	27878	3.38	7.0E-87	AL043314.2	EST_HUMAN	DKFZp434N0323_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434N0323 5'
8264	18144	28384	10.88	7.0E-87	K03002.1	NT	Human mRNA from chromosome 15 gene with homology to MHC-HLA-SB-1 intron A
8264	18144	28385	10.88	7.0E-87	K03002.1	NT	Human mRNA from chromosome 15 gene with homology to MHC-HLA-SB-1 intron A
3482	13398	23203	0.87	6.0E-87	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
5568	15774	25893	1.73	6.0E-87	AB029004.1	NT	Homo sapiens mRNA for KIAA1081 protein, partial cds
8107	17997		3.52	6.0E-87	11432444	NT	Homo sapiens similar to SET translocation (myeloid leukemia-associated) (H. sapiens) (LOC63102), mRNA
1142	11056	20898	1.69	5.0E-87	AA382811.1	EST_HUMAN	EST96094 Testis 1 Homo sapiens cDNA 5' end
9450	11056	20898	1.53	5.0E-87	AA382811.1	EST_HUMAN	EST96094 Testis 1 Homo sapiens cDNA 5' end
950	10874	20721	1.33	4.0E-87	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
1155	11008	20912	10.54	4.0E-87	AB037835.1	NT	Homo sapiens mRNA for KIAA1414 protein, partial cds
1411	11316	21179	0.86	4.0E-87	R78133.1	EST_HUMAN	y80f10.r1 Scores placenta Nb2HP Homo sapiens cDNA clone IMAGE:145579 5' similar to contains Alu repetitive element
1985	11878	21771	0.92	4.0E-87	AB007925.1	NT	Homo sapiens mRNA for KIAA0456 protein, partial cds
2372	12252	22142	1.07	4.0E-87	7706299	NT	Homo sapiens CGI-60 protein (LOC51626), mRNA
2372	12252	22143	1.07	4.0E-87	7706299	NT	Homo sapiens CGI-60 protein (LOC51626), mRNA
3419	13336	23140	2.19	4.0E-87	5174574	NT	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (t(11q23) (Drosophila) homolog); translocated to, 4 (MLL T4) mRNA
5343	16264	26090	6.47	4.0E-87	O00321	SWISSPROT	ETS-RELATED PROTEIN 71 (ETS TRANSLOCATION VARIANT 2)
5986	15595	25696	4.36	4.0E-87	BE247284.1	EST_HUMAN	TCBAP1E4051 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP4051
8505	18378	28644	4.35	4.0E-87	M60676.1	NT	Human von Willebrand factor pseudogene corresponding to exons 23 through 34
8994	18798	29091	2.13	4.0E-87	11417339	NT	Homo sapiens similar to heat shock 70kD protein 9B (mortalin-2) (H. sapiens) (LOC63184), mRNA
9995	19246		14.77	4.0E-87	11417812	NT	Homo sapiens purinergic receptor P2X-like 1, orphan receptor (P2RX1), mRNA
2749	12611	22502	2.99	2.0E-87	4885420	NT	Homo sapiens high-mobility group (nonhistone chromosomal) protein 4 (HMG4), mRNA
3717	13629	23414	0.89	2.0E-87	AU116935.1	EST_HUMAN	AU116935 HEMBA1 Homo sapiens cDNA clone HEMBA1000307 5'
4826	14708	24492	1.17	2.0E-87	BF376311.1	EST_HUMAN	CMO-TN0038-150900-582-h08 TN0038 Homo sapiens cDNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4880	14760	24537	0.8	2.0E-87	BE175478.1	EST_HUMAN	RC5-HT0580-200300-031-G04 HT0580 Homo sapiens cDNA
5473	15393	25457	7.87	2.0E-87	BE734190.1	EST_HUMAN	G01569041F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3843730 5'
5473	15393	25458	7.87	2.0E-87	BE734190.1	EST_HUMAN	G01569041F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3843730 5'
5819	15725		6.27	2.0E-87	BE567193.1	EST_HUMAN	G01341383F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3683348 5'
6256	16122	26275	1.51	2.0E-87	BE294432.1	EST_HUMAN	G01176032F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3531511 5'
6407	16268	26430	32.21	2.0E-87	N48128.1	EST_HUMAN	yw21e07.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:243396 5'
6526	16385	26564	28.31	2.0E-87	N48128.1	EST_HUMAN	yw21e07.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:243396 5'
6892	16771	26966	3.81	2.0E-87	X52851.1	NT	Human cyclophilin gene for cyclophilin (EC 5.2.1.9)
7634	17485		5.11	2.0E-87	BE531136.1	EST_HUMAN	G01278315F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3610539 5'
1165	12645		2.33	1.0E-87	7705683	NT	Homo sapiens putative glycolipid transfer protein (LOC51054), mRNA
1413	11318	21181	0.94	1.0E-87	AW361977.1	EST_HUMAN	PM2-CT0265-141099-001-g04 CT0265 Homo sapiens cDNA
1413	11318	21182	0.94	1.0E-87	AW361977.1	EST_HUMAN	PM2-CT0265-141099-001-g04 CT0265 Homo sapiens cDNA
3649	13563	23349	3.18	1.0E-87	Y00052.1	NT	Human mRNA for T-cell cyclophilin
3673	13587	23374	2.47	1.0E-87	4758927	NT	Homo sapiens neurexin III (NRXN3) mRNA
5057	14927	24599	1.04	1.0E-87	U50949.1	NT	Rattus norvegicus taste bud receptor protein TB 641 (TB 641) gene, complete cds
5774	15681	25788	3.39	1.0E-87	AF073371.1	NT	Homo sapiens growth factor receptor-bound protein 10 (GRB10) gene, exon 8
5774	15681	25789	3.39	1.0E-87	AF073371.1	NT	Homo sapiens growth factor receptor-bound protein 10 (GRB10) gene, exon 8
6376	16238	26398	1.6	1.0E-87	11431590	NT	Homo sapiens protein kinase C, beta 1 (PRKCB1), mRNA
6724	16604	26793	13.13	1.0E-87	AF214562.1	NT	Homo sapiens tracheal epithelium enriched protein (PLUNC) gene, complete cds
7165	17042	27233	1.19	1.0E-87	AB022918.1	NT	Homo sapiens mRNA for alpha2,3-sialyltransferase ST3Gal VI, complete cds
7165	17042	27234	1.19	1.0E-87	AB022918.1	NT	Homo sapiens mRNA for alpha2,3-sialyltransferase ST3Gal VI, complete cds
7554	17405	27620	2.77	1.0E-87	BE818183.1	EST_HUMAN	RC6-BN0276-050700-012-E02 BN0276 Homo sapiens cDNA
7554	17405	27621	2.77	1.0E-87	BE818183.1	EST_HUMAN	RC6-BN0276-050700-012-E02 BN0276 Homo sapiens cDNA
8114	18003	28249	2.06	1.0E-87	5729867	NT	Homo sapiens hec domain and RLD 2 (HERC2), mRNA
8367	18244		1.78	1.0E-87	D10083.1	NT	Homo sapiens RGH1 gene, retrovirus-like element
9539	19751		2.02	1.0E-87	7657632	NT	Homo sapiens sulfotransferase-related protein (SULTX3), mRNA
1090	11006	20847	7.39	9.0E-88	AF167465.1	NT	Homo sapiens double stranded RNA activated protein kinase (PKR) gene, exon 12
1327	11234	21090	2	9.0E-88	AB037820.1	NT	Homo sapiens mRNA for KIAA1399 protein, partial cds
1327	11234	21091	2	9.0E-88	AB037820.1	NT	Homo sapiens mRNA for KIAA1399 protein, partial cds
3574	13488	23279	1.13	9.0E-88	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
4172	14072	23847	2.64	9.0E-88	X91929.1	NT	H.sapiens ECE-1 gene (exon 9)
4172	14072	23848	2.64	9.0E-88	X91929.1	NT	H.sapiens ECE-1 gene (exon 9)
4934	14812	24580	1.23	9.0E-88	AB026898.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7216	17093	27294	3.69	6.0E-88	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
1787	11885		1.19	5.0E-88	7661887	NT	Homo sapiens KIAA0063 gene product (KIAA0063), mRNA
2602	12470	22366	3	5.0E-88	N89399.1	EST_HUMAN	K9719F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA clone K9719 5' similar to ZINC FINGER PROTEIN HZF1
2970	12897	22686	0.92	5.0E-88	AF114488.1	NT	Homo sapiens intersecin short isoform (ITSN) mRNA, complete cds
2978	12905	22704	0.94	5.0E-88	AF114488.1	NT	Homo sapiens intersecin short isoform (ITSN) mRNA, complete cds
2978	12905	22705	0.94	5.0E-88	AF114488.1	NT	Homo sapiens intersecin short isoform (ITSN) mRNA, complete cds
3343	13263		2.31	5.0E-88	AI693217.1	EST_HUMAN	wd68h08.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2336789 3' similar to contains Alu repetitive element; contains element MER22 MER22 repetitive element ;
3491	13407	23212	0.91	5.0E-88	AF114488.1	NT	Homo sapiens intersecin short isoform (ITSN) mRNA, complete cds
4631	14519	24310	0.87	5.0E-88	AF114488.1	NT	Homo sapiens intersecin short isoform (ITSN) mRNA, complete cds
6059	16042	26185	2.64	5.0E-88	H10932.1	EST_HUMAN	ym06b10.r1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:47129 5'
6627	16507	26694	1.84	5.0E-88	AI63284.2	NT	Homo sapiens chromosome 21 segment HS21C084
1307	11214	21070	1.64	4.0E-88	BF091229.1	EST_HUMAN	PM1-TN0028-050900-004-f10 TN0028 Homo sapiens cDNA
1307	11214	21071	1.64	4.0E-88	BF091228.1	EST_HUMAN	PM1-TN0028-050900-004-f10 TN0028 Homo sapiens cDNA
6295	18159	26316	1.93	4.0E-88	11416685	NT	Homo sapiens transforming growth factor, beta-induced, 68kD (TGFB1), mRNA
8281	18160	28402	2.84	4.0E-88	4502694	NT	Homo sapiens cell division cycle 10 (homologous to CDC10 of S. cerevisiae) (CDC10) mRNA
8780	18595	28883	2.1	4.0E-88	7661947	NT	Homo sapiens KIAA0162 gene product (KIAA0162), mRNA
8780	18595	28884	2.1	4.0E-88	7661947	NT	Homo sapiens KIAA0162 gene product (KIAA0162), mRNA
715	10647	20475	0.93	3.0E-88	11545800	NT	Homo sapiens hypothetical protein FLJ21634 (FLJ21634), mRNA
1770	11669		4.77	3.0E-88	4508020	NT	Homo sapiens zinc finger protein 269 (ZNF269) mRNA
2918	12845	22647	4.31	3.0E-88	N69951.1	EST_HUMAN	za48f12.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:295823 3'
4147	14047	23819	1.21	3.0E-88	4501912	NT	Homo sapiens a disintegrin and metalloproteinase domain 23 (ADAM23) mRNA
4147	14047	23820	1.21	3.0E-88	4501912	NT	Homo sapiens a disintegrin and metalloproteinase domain 23 (ADAM23) mRNA
4380	14276		3.17	3.0E-88	11429300	NT	Homo sapiens hypothetical protein FLJ20220 (FLJ20220), mRNA
5242	15166	24937	4.09	3.0E-88	11429567	NT	Homo sapiens valosin-containing protein (VCP), mRNA
5429	15349	25403	3.84	3.0E-88	9966888	NT	Homo sapiens polycythemia rubra vera 1; cell surface receptor (PRV1), mRNA
5498	15417	25480	3.39	3.0E-88	11420897	NT	Homo sapiens v-rat simian leukemia viral oncogene homolog A (ras related) (RALA), mRNA
6204	15964	26098	12.03	3.0E-88	AF279265.1	NT	Homo sapiens putative anion transporter 1 mRNA, complete cds
6452	16313	26479	6.66	3.0E-88	11436400	NT	Homo sapiens retinoblastoma-binding protein 2 (RBBP2), mRNA
6620	16500	26688	8.52	3.0E-88	11421726	NT	Homo sapiens growth differentiation factor 5 (cartilage-derived morphogenetic protein-1) (GDF5), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6769	16648	26836	1.41	3.0E-88	AF034374.1	NT	Homo sapiens molybdenum cofactor biosynthesis protein A and molybdenum cofactor biosynthesis protein C mRNA, complete cds
7427	16440	26626	2.12	3.0E-88	11526262	NT	Homo sapiens v-ets avian erythroblastosis virus E26 oncogene related (ERG), mRNA
9286	18988		4.78	3.0E-88	11417974	NT	Homo sapiens transcobalamin II; macrocytic anemia (TCN2), mRNA
1020	10938	20780	1.42	2.0E-88	7305198	NT	Homo sapiens Calsenilin, presenilin-binding protein, EF hand transcription factor (CSEN), mRNA
1607	11512	21372	0.93	2.0E-88	AF246219.1	NT	Homo sapiens SNARE protein kinase SNAK mRNA, complete cds
1716	11617	21486	4.19	2.0E-88	AF246219.1	NT	Homo sapiens SNARE protein kinase SNAK mRNA, complete cds
4328	14225	24007	1.93	2.0E-88	5031666	NT	Homo sapiens dynein, axonemal, light polypeptide 4 (DNAL4), mRNA
5604	15518	25597	4.98	1.0E-88	AW139565.1	EST_HUMAN	UI-H-B11-aea-d-04-O-UI.s1 NCL_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2718760 3'
5604	15518	25598	4.98	1.0E-88	AW139565.1	EST_HUMAN	UI-H-B11-aea-d-04-O-UI.s1 NCL_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2718760 3'
6004	15909	26033	17.59	1.0E-88	AB007877.1	NT	Homo sapiens KIAA0417 mRNA, complete cds
6004	15909	26034	17.59	1.0E-88	AB007877.1	NT	Homo sapiens KIAA0417 mRNA, complete cds
6263	16128	26282	4.06	1.0E-88	AA488981.1	EST_HUMAN	aa54a11.s1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:824732 3' similar to WP:B0272.2
7524	17375	27584	2.95	1.0E-88	AL043314.2	EST_HUMAN	CE00851 :
8742	17891	28135	2.27	1.0E-88	AA991479.1	EST_HUMAN	DKFZp434N0323_r1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434N0323 5'
9502	19117		2.98	1.0E-88	AL163246.2	NT	cs91g03.s1 NCL_CGAP_GC3 Homo sapiens cDNA clone IMAGE:1612756 3' similar to gb:M16342
8321	18198	28447	4.12	9.0E-89	11421298	NT	HETEROGENEOUS NUCLEAR RIBONUCLEOPROTEINS C1/C2 (HUMAN);
2705	12568	22459	1.41	8.0E-89	BE311557.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C046
426	10371	20194	1.35	7.0E-89	7657213	NT	Homo sapiens transgelin 2 (TAGLN2), mRNA
426	10371	20195	1.35	7.0E-89	7657213	NT	601142409F1 NIH_MGC_14 Homo sapiens cDNA clone IMAGE:3506186 5'
4785	14670	24457	2.94	7.0E-89	4557390	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
4847	14728	24511	5.14	7.0E-89	AL045748.1	EST_HUMAN	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
5334	15254	25076	1.35	7.0E-89	X99832.1	NT	Homo sapiens complement component 8, beta polypeptide (C8B) mRNA
5334	15254	25077	1.35	7.0E-89	X99832.1	NT	DKFZp434E246_r1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434E246 5'
6428	16289	26450	1.78	7.0E-89	11420754	NT	H.sapiens CLN3 gene, complete CDS
8006	17856	28097	1.42	7.0E-89	X62048.1	NT	H.sapiens CLN3 gene, complete CDS
8006	17856	28098	1.42	7.0E-89	X62048.1	NT	Homo sapiens actin related protein 2/3 complex, subunit 1A (41 kD) (ARPC1A), mRNA
8012	17862	28107	1.17	7.0E-89	AB020630.1	NT	H.sapiens Wee1 hu gene
8012	17862	28108	1.17	7.0E-89	AB020630.1	NT	H.sapiens Wee1 hu gene
9920	19393		3.07	7.0E-89	U87927.1	NT	Homo sapiens mRNA for KIAA0823 protein, partial cds
1006	10924	20768	1.07	6.0E-89	5803114	NT	Homo sapiens mRNA for KIAA0823 protein, partial cds
2166	12053	21954	1.12	6.0E-89	4506124	NT	Human aconitate hydratase (ACO2) gene, exon 2
							Homo sapiens inner membrane protein, mitochondrial (mitofilin) (IMMT), mRNA
							Homo sapiens serine/threonine-protein kinase PRP4 homolog (PRP4) mRNA

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2383	12263	22154	1.97	6.0E-89	4507788	NT	Homo sapiens ubiquitin-conjugating enzyme E2L 3 (UBE2L3) mRNA
2383	12263	22155	1.97	6.0E-89	4507788	NT	Homo sapiens ubiquitin-conjugating enzyme E2L 3 (UBE2L3) mRNA
3480	13396	23201	0.84	6.0E-89	7661817	NT	Homo sapiens HSPC159 protein (HSPC159), mRNA
4537	14430	24211	3.5	6.0E-89	AB007866.2	NT	Homo sapiens mRNA for KIAA0406 protein, partial cds
4537	14430	24212	3.5	6.0E-89	AB007866.2	NT	Homo sapiens mRNA for KIAA0406 protein, partial cds
5007	14881	24646	2.77	5.0E-89	BE244323.1	EST_HUMAN	TCBAP2E0383 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP0383
5007	14881	24647	2.77	5.0E-89	BE244323.1	EST_HUMAN	TCBAP2E0383 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP0383
6477	16336	26503	1.33	4.0E-89	BE762749.1	EST_HUMAN	QV3-NT0022-080600-219-g03 NT0022 Homo sapiens cDNA
2847	12775	22563	1.61	3.0E-89	AW097618.1	EST_HUMAN	EST388290 MAGE resequences, MAGN Homo sapiens cDNA
9688	19241	25215	1.92	3.0E-89	AV705749.1	EST_HUMAN	AV705749 AD3 Homo sapiens cDNA clone ADBGA01 5'
121	10348	20175	1.46	2.0E-89	7706670	NT	Homo sapiens PXR2b protein (PXR2b), mRNA
121	10348	20176	1.46	2.0E-89	7706670	NT	Homo sapiens PXR2b protein (PXR2b), mRNA
402	10348	20175	0.91	2.0E-89	7706670	NT	Homo sapiens PXR2b protein (PXR2b), mRNA
402	10348	20176	0.91	2.0E-89	7706670	NT	Homo sapiens PXR2b protein (PXR2b), mRNA
519	10461	20272	0.83	2.0E-89	AB037763.1	NT	Homo sapiens mRNA for KIAA1342 protein, partial cds
2852	12780	22569	2.01	2.0E-89	AI222095.1	EST_HUMAN	qg96cd08.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1843022 3' similar to gb:J04131 GAMMA-GLUTAMYL-TRANSPEPTIDASE 1 PRECURSOR (HUMAN); contains Alu repetitive element;
4053	13955	23731	1.45	2.0E-89	AF089897.1	NT	Homo sapiens topoisomerase-related function protein (TRF4-2) mRNA, partial cds
4061	13963	23740	6.18	2.0E-89	X58742.1	NT	H. sapiens HCK gene for tyrosine kinase (PTK), exons 10-11
4061	13963	23741	6.18	2.0E-89	X58742.1	NT	H. sapiens HCK gene for tyrosine kinase (PTK), exons 10-11
4396	14292	24076	1.14	2.0E-89	AJ007378.1	NT	Homo sapiens GGT gene, exon 5
5368	15288	25123	2.5	2.0E-89	AB007546.1	NT	Homo sapiens gene for LECT2, complete cds
5538	15455	25525	1.6	2.0E-89	U03985.1	NT	Human N-ethylmaleimide-sensitive factor mRNA, partial cds
6520	16379	26557	4.93	2.0E-89	U81C04.1	NT	Human GT24 (GT24) mRNA, partial cds
6630	16510	26699	3.73	2.0E-89	11428801	NT	Homo sapiens solute carrier family 24 (sodium/potassium/calcium exchanger), member 2 (SLC24A2), mRNA
8680	18568	28851	2.63	2.0E-89	11434411	NT	Homo sapiens integrin, alpha 3 (antigen CD49C, alpha 3 subunit of VLA-3 receptor) (ITGA3), mRNA
8854	18666	28953	4.87	2.0E-89	11433673	NT	Homo sapiens cell adhesion molecule with homology to L1CAM (close homologue of L1) (CHL1), mRNA
8955	18762	29055	2.24	2.0E-89	U10692.1	NT	Human MAGE-7 antigen (MAGE7) pseudogene, complete cds

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8860	18672	28960	6.12	1.0E-99	BF196052.1	EST_HUMAN	hr81d09.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3134897 3' similar to TR:O54778 O54778 SOLUTE CARRIER FAMILY 22 -LIKE 2 PROTEIN ;
8860	18672	28961	6.12	1.0E-99	BF196052.1	EST_HUMAN	hr81d09.x1 NCI_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:3134897 3' similar to TR:O54778 O54778 SOLUTE CARRIER FAMILY 22 -LIKE 2 PROTEIN ;
6789	16668	26859	1.16	9.0E-90	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
6789	16668	26860	1.16	9.0E-90	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
1047	10965	20806	1.62	8.0E-90	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
1048	10965	20806	2.93	8.0E-90	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
1308	12690	21072	5.28	8.0E-90	BE670561.1	EST_HUMAN	7e36f08.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3284583 3'
1308	12690	21073	5.28	8.0E-90	BE670561.1	EST_HUMAN	7e36f08.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3284583 3'
818	10746		2.65	7.0E-90	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
6907	16785		1.91	7.0E-90	AA782977.1	EST_HUMAN	ai63d08.s1 Soares testis NHT Homo sapiens cDNA clone 1375503 3'
7183	17060	27260	1.88	7.0E-90	BE962525.2	EST_HUMAN	601655837R1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3855824 3'
7183	17060	27251	1.88	7.0E-90	BE962525.2	EST_HUMAN	601655837R1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3855824 3'
7833	17683	27927	1.98	7.0E-90	H68849.1	EST_HUMAN	y86e04.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:212190 3' similar to SP:C1TC_HUMAN P11586 C-1-TETRAHYDROFOLATE SYNTHASE, CYTOPLASMIC ;
7833	17683	27928	1.98	7.0E-90	H68849.1	EST_HUMAN	y86e04.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:212190 3' similar to SP:C1TC_HUMAN P11586 C-1-TETRAHYDROFOLATE SYNTHASE, CYTOPLASMIC ;
3029	12957	22749	1.14	6.0E-90	X91926.1	NT	H. sapiens ECE-1 gene (exon 6)
3029	12957	22750	1.14	6.0E-90	X91926.1	NT	H. sapiens ECE-1 gene (exon 6)
4134	14034	23809	7.33	6.0E-90	89223398	NT	Homo sapiens hypothetical protein FLJ10388 (FLJ10388), mRNA
4134	14034	23810	7.33	6.0E-90	89223398	NT	Homo sapiens hypothetical protein FLJ10388 (FLJ10388), mRNA
5641	15554	25646	3.54	6.0E-90	U77700.1	NT	Homo sapiens HsGCN1 mRNA, partial cds
5641	15554	25647	3.54	6.0E-90	U77700.1	NT	Homo sapiens HsGCN1 mRNA, partial cds
6846	16725	26918	3.25	6.0E-90	4504794	NT	Homo sapiens inositol 1,4,5-triphosphate receptor, type 3 (ITPR3) mRNA
6846	16725	26919	3.25	6.0E-90	4504794	NT	Homo sapiens inositol 1,4,5-triphosphate receptor, type 3 (ITPR3) mRNA
149	10123		10.5	5.0E-90	AB035344.1	NT	Homo sapiens TCE6 gene, exon 1-10b
1175	11087	20931	1.55	5.0E-90	U80226.1	NT	Human gamma-aminobutyric acid transaminase mRNA, partial cds
2508	12382	22273	2.19	5.0E-90	AF114487.1	NT	Homo sapiens intersectin long isoform (ITSN) mRNA, complete cds
4440	14334	24124	3.08	5.0E-90	4506354	NT	Homo sapiens pregnancy-zone protein (PZP) mRNA
4507	14400	24186	1.07	5.0E-90	AA705222.1	EST_HUMAN	z82g10.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:461442 3'
4507	14400	24187	1.07	5.0E-90	AA705222.1	EST_HUMAN	z82g10.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:461442 3'
4571	14463	24251	0.98	5.0E-90	AL135549.1	EST_HUMAN	DKFZp762P1616_r1 762 (synonym: hmel2) Homo sapiens cDNA clone DKFZp762P1616 5'

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Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5433	15353	25409	2.52	5.0E-90	Z16411.1	NT	H.sapiens mRNA encoding phospholipase c
5523	15353	25409	2.13	5.0E-90	Z16411.1	NT	H.sapiens mRNA encoding phospholipase c
6283	16147	26302	2.26	5.0E-90	AF113708.1	NT	Homo sapiens angiotensin 4 (ANG4) mRNA, partial cds
6283	16147	26303	2.26	5.0E-90	AF113708.1	NT	Homo sapiens angiotensin 4 (ANG4) mRNA, partial cds
6464	16323	26489	7.93	5.0E-90	4557258	NT	Homo sapiens adenylate cyclase 9 (ADCY9) mRNA
6825	16704	26899	4.66	5.0E-90	11345483	NT	Homo sapiens hypothetical protein FL13222 (FL13222), mRNA
7581	17432	27646	1.24	5.0E-90	11419429	NT	Homo sapiens similar to ectonucleotide pyrophosphatase/phosphodiesterase 3 (H. sapiens) (LOC63214), mRNA
7988	17818	28060	15.41	5.0E-90	11433721	NT	Homo sapiens ATPase, aminophospholipid transporter-like, Class I, type 8A, member 2 (ATP8A2), mRNA
9744	19306		2.16	5.0E-90	AB011399.1	NT	Homo sapiens gene for AF-6, complete cds
9789	19299		2.37	5.0E-90	AF152336.1	EST_HUMAN	ar76h05.x1 Barstead aorta HPLRB6 Homo sapiens cDNA clone IMAGE:2128761 3'
299	10263	20083	1.85	4.0E-90	AF231920.1	NT	Homo sapiens chromosome 21 unknown mRNA
299	10263	20084	1.85	4.0E-90	AF231920.1	NT	Homo sapiens chromosome 21 unknown mRNA
1070	10986	20829	2.94	4.0E-90	4505313	NT	Homo sapiens myosin phosphatase, target subunit 1 (MYPT1), mRNA
1663	11565	21432	9.22	4.0E-90	X9033.1	NT	H.sapiens gene encoding discoidin receptor tyrosine kinase, exon 16
4557	14449	24236	4.07	4.0E-90	D87676.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
4691	14577	24372	1.97	4.0E-90	AB033070.1	NT	Homo sapiens mRNA for KIAA1244 protein, partial cds
4713	14599	24385	1.9	4.0E-90	M95967.1	NT	Human prohormone converting enzyme (NEC2) gene, exon 8
8901	18709	29004	103.62	3.0E-90	BE663833.1	EST_HUMAN	601335244F1 NIH_MGC 39 Homo sapiens cDNA clone IMAGE:3689147 5'
207	10178	19995	4.28	2.0E-90	BE637913.1	EST_HUMAN	601067379F1 NIH_MGC 10 Homo sapiens cDNA clone IMAGE:3453334 5'
1156	11069	20913	3.65	2.0E-90	5031748	NT	Homo sapiens high-mobility group (nonhistone chromosomal) protein 17 (HMG17), mRNA
1156	11069	20914	3.65	2.0E-90	5031748	NT	Homo sapiens high-mobility group (nonhistone chromosomal) protein 17 (HMG17), mRNA
3771	13683	23465	2.81	2.0E-90	AI138213.1	EST_HUMAN	qc54c02.x1 Soares, placenta 8tc6weeks 2NhlHP6tc6W Homo sapiens cDNA clone IMAGE:1713410 3'
4588	14476	24264	1.13	2.0E-90	AB006627.1	NT	similar to SW:OLF3 MOUSE P23275 OLFACTORY RECEPTOR OR3. ;
4820	14703	24488	8.33	2.0E-90	5729855	NT	Homo sapiens mRNA for KIAA0289 gene, partial cds
5534	15451	25519	4.34	2.0E-90	AW672686.1	EST_HUMAN	Homo sapiens GRB2-related adaptor protein (GRAP) mRNA
7638	17489	27708	2.9	2.0E-90	11427320	NT	ba49d05.y3 NIH_MGC 10 Homo sapiens cDNA clone IMAGE:2899881 5' similar to TR:O75208 O75208 HYPOTHETICAL 35.5 KD PROTEIN. ;
7638	17489	27709	2.9	2.0E-90	11427320	NT	Homo sapiens similar to laminin receptor 1 (67kD, ribosomal protein SA) (H. sapiens) (LOC63484), mRNA
7722	17572	27796	1.56	2.0E-90	AU118985.1	EST_HUMAN	Homo sapiens similar to laminin receptor 1 (67kD, ribosomal protein SA) (H. sapiens) (LOC63484), mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7722	17572	27797	1.56	2.0E-90	AU118985.1	EST_HUMAN	AU118985 HEMBA1 Homo sapiens cDNA clone HEMBA1004795 5'
8765	17914	28159	49.27	2.0E-90	1102471.1	NT	Homo sapiens myosin, heavy polypeptide 4, skeletal muscle (MYH4), mRNA
275	10241	20060	3.39	1.0E-90	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
370	12639	20148	1.21	1.0E-90	AF231920.1	NT	Homo sapiens chromosome 21 unknown mRNA
371	12639	20148	1.04	1.0E-90	AF231920.1	NT	Homo sapiens chromosome 21 unknown mRNA
680	10613	20435	2.03	1.0E-90	AJ237589.1	NT	Homo sapiens mRNA for T-box transcription factor (TBX20 gene), partial
680	10613	20436	2.03	1.0E-90	AJ237589.1	NT	Homo sapiens mRNA for T-box transcription factor (TBX20 gene), partial
713	10645	20472	7.71	1.0E-90	AF264750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
713	10645	20473	7.71	1.0E-90	AF264750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
1094	11010		2.45	1.0E-90	4507828	NT	Homo sapiens Kruppel-like factor 7 (ubiquitous) (KLF7), mRNA
1284	11192	21044	3.47	1.0E-90	AF096154.1	NT	Homo sapiens protein phosphatase 2A BR gamma subunit gene, exon 3
1284	11192	21045	3.47	1.0E-90	AF096154.1	NT	Homo sapiens protein phosphatase 2A BR gamma subunit gene, exon 3
1644	11548		4.02	1.0E-90	BE379884.1	EST_HUMAN	G0115953F2 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3511118 5'
1860	11756	21831	4.98	1.0E-90	11420514	NT	Homo sapiens similar to SALL1 (sal (Drosophila))-like (LOC57167), mRNA
2823	12752	22845	8.4	1.0E-90	6005720	NT	Homo sapiens chromosome 8 open reading frame 2 (C8ORF2), mRNA
3777	13689	23473	1.18	1.0E-90	AB020710.1	NT	Homo sapiens mRNA for KIAA0903 protein, partial cds
3777	13689	23474	1.18	1.0E-90	AB020710.1	NT	Homo sapiens mRNA for KIAA0903 protein, partial cds
4326	14223	24005	1	1.0E-90	AF167340.1	NT	Homo sapiens soluble interleukin 1 receptor accessory protein (IL1RAP) gene, exon 8, alternative exons 9 and complete cds, alternatively spliced
5481	15401	25464	2.2	1.0E-90	AB014533.1	NT	Homo sapiens solute carrier family 1 (high affinity aspartate/glutamate transporter), member 6 (SLC1A6), mRNA
6521	16380	26558	2.85	1.0E-90	11426758	NT	
7121	16998	27189	3.78	1.0E-90	11422086	NT	Homo sapiens brefeldin A-inhibited guanine nucleotide-exchange protein 2 (BIG2), mRNA
7356	17224		1.22	1.0E-90	AF163864.1	NT	Homo sapiens SNCA isoform (SNCA) gene, complete cds, alternatively spliced
7371	17240	27444	1.72	1.0E-90	11422109	NT	Homo sapiens CGI-16 protein (LOC51006), mRNA
7371	17240	27445	1.72	1.0E-90	11422109	NT	Homo sapiens CGI-16 protein (LOC51006), mRNA
9732	19268	25225	1.89	1.0E-90	AB020569.1	NT	Homo sapiens DNA for Human P2XM, complete cds
9732	19268	25226	1.89	1.0E-90	AB020569.1	NT	Homo sapiens DNA for Human P2XM, complete cds
4101	14001	23780	5.48	8.0E-91	D12234.1	EST_HUMAN	HUM000S381 Liver HepG2 cell line. Homo sapiens cDNA clone s381 3'
1428	11333	21199	0.88	7.0E-91	AF053768.1	NT	Rattus norvegicus brain specific cortactin-binding protein CBP90 mRNA, partial cds
6835	16714	26907	2.05	7.0E-91	11419234	NT	Homo sapiens makorin, ring finger protein, 1 (MKRN1), mRNA
3429	13346	23151	1.47	5.0E-91	AA702794.1	EST_HUMAN	z90b04.s1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:448015 3'
4415	14309	24092	1.05	5.0E-91	AU143539.1	EST_HUMAN	AU143539 Y79AA1 Homo sapiens cDNA clone Y79AA1002087 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4415	14309	24093	1.05	5.0E-91	AU143539.1	EST_HUMAN	AU143539 Y79AA1 Homo sapiens cDNA clone Y79AA1002087 5'
4703	14589	24379	0.82	5.0E-91	7110634	NT	Homo sapiens chromosome 22 open reading frame 5 (C22ORF5), mRNA
4703	14589	24380	0.82	5.0E-91	7110634	NT	Homo sapiens chromosome 22 open reading frame 5 (C22ORF5), mRNA
7087	16964	27157	1.34	5.0E-91	AV649878.1	EST_HUMAN	AV649878 GLC Homo sapiens cDNA clone GLOBYF08 3'
7087	16964	27158	1.34	5.0E-91	AV649878.1	EST_HUMAN	AV649878 GLC Homo sapiens cDNA clone GLOBYF08 3'
3166	13091	22895	1.3	4.0E-91	AF156776.1	NT	Homo sapiens lysophosphatidic acid acyltransferase-delta (LPAAT-delta) mRNA, complete cds
3166	13091	22896	1.3	4.0E-91	AF156776.1	NT	Homo sapiens lysophosphatidic acid acyltransferase-delta (LPAAT-delta) mRNA, complete cds
8301	18180	28427	3.13	4.0E-91	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
9239	18954	25314	1.67	4.0E-91	M77994.1	EST_HUMAN	EST01579 Hippocampus, Stratagene (cat. #936205) Homo sapiens cDNA clone HHCMC80 similar to Retrovirus-related gag polyprotein
9239	18954	25360	1.67	4.0E-91	M77994.1	EST_HUMAN	EST01579 Hippocampus, Stratagene (cat. #936205) Homo sapiens cDNA clone HHCMC80 similar to Retrovirus-related gag polyprotein
1601	11506	21366	5.12	3.0E-91	11430193	NT	Homo sapiens solute carrier family 4, anion exchanger, member 3 (SLC4A3), mRNA
1601	11506	21367	5.12	3.0E-91	11430193	NT	Homo sapiens solute carrier family 4, anion exchanger, member 3 (SLC4A3), mRNA
2624	12492	22382	0.99	3.0E-91	AF169555.1	NT	Homo sapiens beta-ureidopropionase (BUP1) gene, exon 6
2624	12492	22383	0.99	3.0E-91	AF169555.1	NT	Homo sapiens beta-ureidopropionase (BUP1) gene, exon 6
3297	13219	23020	1.77	3.0E-91	AL163283.2	NT	Homo sapiens chromosome 21 segment HS21C083
3416	13333	23136	2.96	3.0E-91	AB033104.1	NT	Homo sapiens mRNA for KIAA1278 protein, partial cds
3416	13333	23137	2.96	3.0E-91	AB033104.1	NT	Homo sapiens mRNA for KIAA1278 protein, partial cds
3720	13632	23418	0.83	3.0E-91	AF084530.1	NT	Homo sapiens cyclin-D binding Myb-like protein mRNA, complete cds
4487	14381	24168	4.02	3.0E-91	M30938.1	NT	Human Ku (p70p80) subunit mRNA, complete cds
4905	14785	24560	1.2	3.0E-91	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
4905	14785	24561	1.2	3.0E-91	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
5488	15407	25470	1.45	3.0E-91	11434964	NT	Homo sapiens epididymal secretory protein (19.5kD) (HE1), mRNA
5807	15712		2.39	3.0E-91	4502740	NT	Homo sapiens cyclin-dependent kinase 6 (CDK6) mRNA
5967	15872	25996	4.11	3.0E-91	11497611	NT	Homo sapiens gamma-aminobutyric acid (GABA) B receptor, 1 (GABBR1), transcript variant 2, mRNA
5967	15872	25997	4.11	3.0E-91	11497611	NT	Homo sapiens gamma-aminobutyric acid (GABA) B receptor, 1 (GABBR1), transcript variant 2, mRNA
6502	16361	26535	4.4	3.0E-91	U86959.1	NT	Human L-type calcium channel beta-1 subunit (CACNLB1) gene, exons 10 and 11
6502	16361	26536	4.4	3.0E-91	U86959.1	NT	Human L-type calcium channel beta-1 subunit (CACNLB1) gene, exons 10 and 11
7093	16970	27163	3.31	3.0E-91	D16494.1	NT	Human mRNA for very low density lipoprotein receptor, complete cds
9480	19104	25296	1.45	3.0E-91	AF240796.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9812	12492	22382	3.03	3.0E-91	AF169555.1	NT	Homo sapiens beta-ureidopropionase (BUP1) gene, exon 6
9812	12492	22383	3.03	3.0E-91	AF169555.1	NT	Homo sapiens beta-ureidopropionase (BUP1) gene, exon 6
42	10030	19833	3.02	1.0E-91	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21 C084
1225	11133	20987	3.58	1.0E-91	AW449746.1	EST_HUMAN	UI-H-B13-aks-d-01-0-UI.s1 NCL_CGAP_Sub5 Homo sapiens cDNA clone IMAGE:2735280 3'
6090	16035	26175	1.7	1.0E-91	BF3448182.1	EST_HUMAN	602022088F1 NCL_CGAP_Brn67 Homo sapiens cDNA clone IMAGE:4157804 5'
6090	16035	26176	1.7	1.0E-91	BF3448182.1	EST_HUMAN	602022088F1 NCL_CGAP_Brn67 Homo sapiens cDNA clone IMAGE:4157804 5'
9398	19895		2.42	1.0E-91	HT5212.1	EST_HUMAN	ym30s03.r1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:49587 5'
1221	11130	20981	8.41	9.0E-92	AJ001689.1	NT	Homo sapiens NKG2D gene, exon 10
1221	11130	20982	8.41	9.0E-92	AJ001689.1	NT	Homo sapiens NKG2D gene, exon 10
5353	15273	25103	3.56	9.0E-92	J03007.1	NT	Homo sapiens Na ⁺ ,K ⁺ ATPase alpha-subunit mRNA, partial cds
5442	15362	25418	1.75	9.0E-92	11427149	NT	Homo sapiens hypothetical protein FLJ20260 (FLJ20260), mRNA
5882	15789	25911	3.22	9.0E-92	AF310105.1	NT	Homo sapiens NALP1 mRNA, complete cds
6878	16757	26954	19.33	9.0E-92	AB040945.1	NT	Homo sapiens mRNA for KIAA1512 protein, partial cds
6878	16757	26955	19.33	9.0E-92	AB040945.1	NT	Homo sapiens mRNA for KIAA1512 protein, partial cds
7342	17210	27409	1.66	9.0E-92	11422086	NT	Homo sapiens brefeldin A-inhibited guanine nucleotide-exchange protein 2 (BIG2), mRNA
87	10071	19887	2.02	8.0E-92	W26367.1	EST_HUMAN	26f3 Human retina cDNA randomly primed sublibrary Homo sapiens cDNA
283	10248	20068	5.9	8.0E-92	BE386363.1	EST_HUMAN	601273513F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3614667 5'
1778	11677	21554	1.29	8.0E-92	11434722	NT	Homo sapiens diacylglycerol kinase, gamma (90KD) (DGKG), mRNA
1778	11677	21555	1.29	8.0E-92	11434722	NT	Homo sapiens diacylglycerol kinase, gamma (90KD) (DGKG), mRNA
5944	15849	25973	1.29	8.0E-92	AJ000979.1	NT	Homo sapiens MCP-4 gene
6908	16786	26978	3.61	8.0E-92	L04193.1	NT	Human lens membrane protein (mp19) gene, exon 11
6908	16786	26979	3.61	8.0E-92	L04193.1	NT	Human lens membrane protein (mp19) gene, exon 11
7242	17119	27314	2.61	8.0E-92	AB014511.1	NT	Homo sapiens mRNA for KIAA0611 protein, partial cds
7760	17610	27836	1.31	8.0E-92	Y13829.1	NT	Homo sapiens mRNA for MBNL protein
8180	18067	28316	4.53	8.0E-92	AF074393.1	NT	Homo sapiens nuclear mitogen- and stress-activated protein kinase-1 (MSK1) mRNA, complete cds
8667	18556	28841	3.21	8.0E-92	4503340	NT	Homo sapiens dihydrolipoamide S-succinyltransferase (E2 component of 2-oxo-glutarate complex) (DLST) mRNA
9572	19162	25268	1.43	8.0E-92	11434704	NT	Homo sapiens fragile X mental retardation, autosomal homolog 1 (FXR1), mRNA
60	10046	19858	2.64	7.0E-92	M60676.1	NT	Human von Willebrand factor pseudogene corresponding to exons 23 through 34
236	12662	20020	2.51	7.0E-92	AB018301.1	NT	Homo sapiens mRNA for KIAA0758 protein, partial cds
236	12662	20021	2.51	7.0E-92	AB018301.1	NT	Homo sapiens mRNA for KIAA0758 protein, partial cds
576	10514		1.25	7.0E-92	AF007822.1	NT	Homo sapiens cytoplasmic Sepsis truncated isoform mRNA, complete cds
1259	11166	21017	1.91	7.0E-92	4502384	NT	Homo sapiens B-cell CLL/lymphoma 7b (BCL7B) mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2139	12027	21923	1.67	7.0E-92	5031570	NT	Homo sapiens ARP2 (actin-related protein 2, yeast) homolog (ACTR2), mRNA
2139	12027	21924	1.67	7.0E-92	5031570	NT	Homo sapiens ARP2 (actin-related protein 2, yeast) homolog (ACTR2), mRNA
2517	12391	22283	2.32	7.0E-92	AF167706.1	NT	Homo sapiens cysteine-rich repeat-containing protein S62 precursor, mRNA, complete cds
2693	12558	22445	5.01	7.0E-92	6005738	NT	Homo sapiens NRAS-related gene (D1S155E), mRNA
2724	12586	22481	1.04	7.0E-92	AB031007.1	NT	Homo sapiens DNA, MHC class I region, 7.1 ancestral haplotype
3301	15068	23023	0.92	7.0E-92	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
3301	15068	23024	0.92	7.0E-92	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
4484	14378	24165	1.61	7.0E-92	S71824.1	NT	N-CAM=145 kda neural cell adhesion molecule [human, small cell lung cancer cell line OS2-R, mRNA, 2960 nt]
4484	14378	24166	1.61	7.0E-92	S71824.1	NT	N-CAM=145 kda neural cell adhesion molecule [human, small cell lung cancer cell line OS2-R, mRNA, 2960 nt]
5110	14978	24752	1.45	7.0E-92	4506118	NT	Homo sapiens prospero-related homeobox 1 (PROX1) mRNA
5219	15142	24836	4.87	7.0E-92	AA446206.1	EST_HUMAN	zw66d12.1 Scores tests NHT Homo sapiens cDNA clone IMAGE:781175 5'
1569	11473		0.93	5.0E-92	BE360882.1	EST_HUMAN	601283012F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3605018 5'
2738	12600	22494	2.45	3.0E-92	BE909714.1	EST_HUMAN	601501242F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3902339 5'
5593	15498	25575	3.74	3.0E-92	AA378336.1	EST_HUMAN	EST91020 Synovial sarcoma Homo sapiens cDNA 5' and similar to ribosomal protein S13
8146	18034	28281	5.7	3.0E-92	X15804.1	NT	Human mRNA for alpha-actinin
8146	18034	28282	5.7	3.0E-92	X15804.1	NT	Human mRNA for alpha-actinin
23	10010	19803	1.53	2.0E-92	4501898	NT	Homo sapiens activin A receptor, type IIB (ACVR2B) mRNA
172	10143	19958	2.93	2.0E-92	11422946	NT	Homo sapiens hypothetical protein dJ462023.2 (DJ462023.2), mRNA
172	10143	19959	2.93	2.0E-92	11422946	NT	Homo sapiens hypothetical protein dJ462023.2 (DJ462023.2), mRNA
732	10664	20497	1.38	2.0E-92	BE299190.1	EST_HUMAN	601118337F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3028304 5'
732	10664	20498	1.38	2.0E-92	BE299190.1	EST_HUMAN	601118337F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3028304 5'
1686	11588		2.74	2.0E-92	S76653.1	NT	mg-mas-related [human, Genomic, 2416 nt]
1894	11789	21667	1.55	2.0E-92	A1818119.1	EST_HUMAN	wk27d07.x1 NCL_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2413549 3' similar to TR:Q12844
1894	11789	21668	1.55	2.0E-92	A1818119.1	EST_HUMAN	Q12844 BREAKPOINT CLUSTER REGION PROTEIN ;
2002	11895	21787	4.71	2.0E-92	4506880	NT	wk27d07.x1 NCL_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2413549 3' similar to TR:Q12844
2623	12491	22381	37.64	2.0E-92	6912457	NT	Q12844 BREAKPOINT CLUSTER REGION PROTEIN ;
3562	13476	23265	1.02	2.0E-92	AF231919.1	NT	Homo sapiens syndecan 4 (amphiglycan, ryudocan) (SDC4) mRNA
3562	13476	23266	1.02	2.0E-92	AF231919.1	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
3562	13476	23266	1.02	2.0E-92	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
3562	13476	23266	1.02	2.0E-92	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
3631	13545	23332	4.99	2.0E-92	5803180	NT	Homo sapiens stress-induced-phosphoprotein 1 (Hsp70/Hsp90-organizing protein) (STIP1), mRNA

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Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4191	14091	23969	1.02	2.0E-92	M10976.1	NT	Human endogenous retroviral DNA (4-1), complete retroviral segment
4648	14534	24323	0.79	2.0E-92	AF136523.1	NT	Homo sapiens bile salt export pump (BSEP) mRNA, complete cds
4922	14801		2.53	2.0E-92	AL040437.1	EST_HUMAN	DKFZp434C0414.1_r1_434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434C0414.5
5989	15894	26017	2.49	2.0E-92	AB028991.1	NT	Homo sapiens mRNA for KIAA1068 protein, partial cds
6420	16273		2.25	2.0E-92	U67780.1	NT	Human NPY Y1-like receptor pseudogene mRNA, complete cds
7141	17018	27211	1.37	2.0E-92	AW340174.1	EST_HUMAN	hd02h02.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2908371 3' similar to TR:O02711
8142	18030	28276	5.91	2.0E-92	11434900	NT	O02711 PRO-POL-DUTPASE POLYPROTEIN ;
9589	19172	25274	2.55	2.0E-92	AB029016.1	NT	Homo sapiens thyroid stimulating hormone receptor (TSHR), mRNA
9839	12491	22381	26.65	2.0E-92	6912457	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
1807	11704	21582	1.11	1.0E-92	R78078.1	EST_HUMAN	y80e08.r1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:145574 5'
1807	11704	21583	1.11	1.0E-92	R78078.1	EST_HUMAN	y80e08.r1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:145574 5'
2028	11919	21810	34.72	1.0E-92	4506668	NT	Homo sapiens ribosomal protein, large, P1 (RPLP1) mRNA
7286	17162	27360	4.04	1.0E-92	AJ380356.1	EST_HUMAN	tg01502.x1 NCI CGAP CLL1 Homo sapiens cDNA clone IMAGE:2107467 3' similar to SW:PTNF_HUMAN Q16825 PROTEIN-TYROSINE PHOSPHATASE D1 ;contains Alu repetitive element;contains element MER17 repetitive element ;
7286	17162	27361	4.04	1.0E-92	AJ380356.1	EST_HUMAN	tg01502.x1 NCI CGAP CLL1 Homo sapiens cDNA clone IMAGE:2107467 3' similar to SW:PTNF_HUMAN Q16825 PROTEIN-TYROSINE PHOSPHATASE D1 ;contains Alu repetitive element;contains element MER17 repetitive element ;
1983	11876	21769	3.14	9.0E-93	AU121681.1	EST_HUMAN	AU121681 MAMMA1 Homo sapiens cDNA clone MAMMA1000738 5'
1996	11890		9.21	9.0E-93	AA316723.1	EST_HUMAN	EST188414 HCC cell line (metastasis to liver in mouse) II Homo sapiens cDNA 5' end similar to ribosomal protein L29
2610	12478		1.46	9.0E-93	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
3563	13477	23267	0.96	9.0E-93	BE388571.1	EST_HUMAN	G01281867F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3603832 5'
8911	18719		9.8	9.0E-93	11418526	NT	Homo sapiens ribosomal protein L10a (RPL10A), mRNA
5975	15879	26003	2.49	8.0E-93	BF036364.1	EST_HUMAN	G01460521F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3863908 5'
246	10212	20028	6.24	7.0E-93	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
1359	11265	21121	1.25	5.0E-93	AB014511.1	NT	Homo sapiens mRNA for KIAA0611 protein, partial cds
1385	11290	21145	5.39	5.0E-93	AJ674184.1	EST_HUMAN	wc09c08.x1 NCI CGAP_P128 Homo sapiens cDNA clone IMAGE:2314670 3'
1385	11290	21146	5.39	5.0E-93	AJ674184.1	EST_HUMAN	wc09c08.x1 NCI CGAP_P128 Homo sapiens cDNA clone IMAGE:2314670 3'
1459	11384		0.95	5.0E-93	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
3195	13120	22925	2.42	5.0E-93	X04201.1	NT	Human skeletal muscle 1.3 kb mRNA for tropomyosin

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6540	16398	26577	3.67	5.0E-93	AF067136.1	NT	Homo sapiens protein phosphatase-1 regulatory subunit 7 (PPP1R7) gene, exon 11, complete cds and alternatively spliced product
7549	17400	27613	2.07	5.0E-93	AF274863.1	NT	Homo sapiens secretory pathway component Sec31B-1 mRNA, alternatively spliced, complete cds
7644	17494	27715	1.31	5.0E-93	5032156	NT	Homo sapiens TAR (HIV) RNA-binding protein 1 (TARBP1) mRNA
8200	18085	28336	3.01	5.0E-93	11439699	NT	Homo sapiens nucleobindin 2 (NUCB2), mRNA
9487	19423	25173	1.84	5.0E-93	11417877	NT	Homo sapiens gamma-glutamyltransferase 1 (GGT1), mRNA
82	10066		4.72	4.0E-93	AA459933.1	EST_HUMAN	z30e09.s1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:795688 3' similar to SW:CLPA_RAT
437	10381	20204	1.75	4.0E-93	4557879	NT	P37397 CALPONIN, ACIDIC ISOFORM ;
437	10381	20205	1.76	4.0E-93	4557879	NT	Homo sapiens interferon gamma receptor 1 (IFNGR1) mRNA
765	10685	20622	1.33	4.0E-93	7657454	NT	Homo sapiens interferon gamma receptor 1 (IFNGR1) mRNA
755	10685	20523	1.33	4.0E-93	7657454	NT	Homo sapiens pscadillo (zbratfish) homolog 1, containing BRCT domain (PES1), mRNA
1166	11078	20923	2.08	4.0E-93	8923668	NT	Homo sapiens pscadillo (zbratfish) homolog 1, containing BRCT domain (PES1), mRNA
1934	11829	21712	5.06	4.0E-93	AF047677.1	NT	Homo sapiens hypothetical protein FLJ20731 (FLJ20731), mRNA
2349	12229	22126	0.84	4.0E-93	AL163301.2	NT	Homo sapiens dystrophin (DMD) gene, deletion breakpoints 1-3 in intron 5
2564	12435	22328	2.18	4.0E-93	7666972	NT	Homo sapiens cysotrophin (DMD) gene, deletion breakpoints 1-3 in intron 5
3962	13869	23647	1.44	4.0E-93	4504654	NT	Homo sapiens TNF-inducible protein CG12-1 (CG12-1), mRNA
							Homo sapiens interleukin 18 receptor 1 (IL18R1) mRNA
5465	15385	25445	4.81	4.0E-93	T45864.1	EST_HUMAN	y694c12.1 Stratagene liver (#937224) Homo sapiens cDNA clone IMAGE:78838 5' similar to similar to SP:A44391 A44391 SERUM RESPONSE ELEMENT-BINDING PROTEIN SRE-ZBP - HUMAN .
8475	18348	28613	19.24	4.0E-93	AV692051.1	EST_HUMAN	AV692051 GKC Homo sapiens cDNA clone GKCDRF07 5'
3601	13515	23302	5.99	3.0E-93	BF600630.1	EST_HUMAN	602248554F1 NIH_MGC 62 Homo sapiens cDNA clone IMAGE:4332036 5'
3601	13515	23303	5.99	3.0E-93	BF600630.1	EST_HUMAN	602248554F1 NIH_MGC 62 Homo sapiens cDNA clone IMAGE:4332036 5'
4142	14042		2.7	3.0E-93	AF225896.1	NT	Homo sapiens tensin mRNA, complete cds
5535	15452	25520	1.58	3.0E-93	AI553853.1	EST_HUMAN	tn29g03.x1 NCI_CGAP_Brn25 Homo sapiens cDNA clone IMAGE:2169076 3'
5535	15452	25521	1.58	3.0E-93	AI553853.1	EST_HUMAN	tn29g03.x1 NCI_CGAP_Brn25 Homo sapiens cDNA clone IMAGE:2169076 3'
5962	15857	25979	1.32	3.0E-93	11426182	NT	Homo sapiens GCN5 (general control of amino-acid synthesis, yeast, homolog)-like 2 (GCN5L2), mRNA
8178	18066	28314	4.15	3.0E-93	AI624829.1	EST_HUMAN	w602d05.x1 NCI_CGAP_G06 Homo sapiens cDNA clone IMAGE:2304489 3'
163	10155	19970	8.31	2.0E-93	AB015610.1	NT	Chlorocebus aethiops mRNA for ribosomal protein S4X, complete cds
183	10155	19971	8.31	2.0E-93	AB015610.1	NT	Chlorocebus aethiops mRNA for ribosomal protein S4X, complete cds
320	10282	20100	6.69	2.0E-93	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
321	10282	20100	7.68	2.0E-93	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085

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Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1598	11503	21363	1.48	2.0E-93	AF256896.1	NT	Homo sapiens tensin mRNA, complete cds
2083	11973	21868	1.02	2.0E-93	U40763.1	NT	Human Cdk-associated RS cyclophilin CARG-Oyp mRNA, complete cds
2436	12313	22210	0.89	2.0E-93	BE252982.1	EST_HUMAN	601117586F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3358220 5'
5088	14958	24732	1.02	2.0E-93	BE253201.1	EST_HUMAN	601116810F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3357243 5'
5325	15245	25049	4.59	2.0E-93	AW964385.1	EST_HUMAN	EST376458 IMAGE resequences, MAGH Homo sapiens cDNA
5462	15382	25442	1.52	2.0E-93	11430039	NT	Homo sapiens hypothetical protein (LOC51318), mRNA
6014	15918		1.32	2.0E-93	AW502002.1	EST_HUMAN	UI-HF-BND-aks-g-09-0-UIr1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3078329 5'
8986	19476	29093	2.87	2.0E-93	AI312025.1	EST_HUMAN	qp78b10.x1 Soares fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:1929115 3'
9386	19048		1.52	2.0E-93	AA126735.1	EST_HUMAN	z129c10.s1 Soares pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:503346 3'
9465	19095		1.31	2.0E-93	L41825.1	NT	Homo sapiens CYP17 gene, 5' end
9724	19263		2.75	2.0E-93	BF035327.1	EST_HUMAN	601458531F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3862086 5'
98	10081	19897	1.64	1.0E-93	AF238897.1	NT	Homo sapiens CTR1 pseudogene
96	10081	19898	1.64	1.0E-93	AF238897.1	NT	Homo sapiens CTR1 pseudogene
507	10449	20262	2.56	1.0E-93	7657016	NT	Homo sapiens hypothetical protein (D3328E19.C1), mRNA
585	10523	20330	3.75	1.0E-93	AI146755.1	EST_HUMAN	0y8408.x1 NCL_CGAP_CLL1 Homo sapiens cDNA clone IMAGE:1672503 3' similar to TR:Q62384 Q62384 ZINC FINGER PROTEIN :
854	10781	20631	3.32	1.0E-93	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
1217	11125	20974	6.41	1.0E-93	8923270	NT	Homo sapiens hypothetical protein FLJ20291 (FLJ20291), mRNA
1217	11125	20975	6.41	1.0E-93	8923270	NT	Homo sapiens hypothetical protein FLJ20291 (FLJ20291), mRNA
1321	11228	21083	1.55	1.0E-93	AB046783.1	NT	Homo sapiens mRNA for KIAA1563 protein, partial cds
1323	11230	21085	1.68	1.0E-93	AF167706.1	NT	Homo sapiens cysteine-rich repeat-containing protein S62 precursor, mRNA, complete cds
2289	12172	22070	1.01	1.0E-93	AF231981.1	NT	Homo sapiens long chain polyunsaturated fatty acid elongation enzyme (HELO1) mRNA, complete cds
2415	12292	22190	4.16	1.0E-93	AF050066.1	NT	Homo sapiens MHG class 1 region
2459	12336		1.09	1.0E-93	AL137200.1	NT	Novel human gene mapping to chromosome 1
2792	11181	21030	2.69	1.0E-93	BE297369.1	EST_HUMAN	601177686F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3532965 5'
2792	11181	21031	2.69	1.0E-93	BE297369.1	EST_HUMAN	601177686F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3532965 5'
2903	12830	22627	4.33	1.0E-93	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
4331	14228	24010	1.44	1.0E-93	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
5417	15338	25391	1.62	1.0E-93	U78509.1	NT	Homo sapiens glucocorticoid receptor (GRL) gene, intron D, exon 5, and intron E
5417	15338	25392	1.62	1.0E-93	U78509.1	NT	Homo sapiens glucocorticoid receptor (GRL) gene, intron D, exon 5, and intron E
5607	15522	25604	9.15	1.0E-93	4557792	NT	Homo sapiens neurofibromin 1 (neurofibromatosis, von Recklinghausen disease, Watson disease) (NF1) mRNA
6067	16051	26197	2.06	1.0E-93	11431590	NT	Homo sapiens protein kinase C, beta 1 (PRKCB1), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6299	16163	26320	4.09	1.0E-93	D42072.1	NT	Human mRNA for NF1 N-isoform-exon11, complete cds
6807	16686	26876	2.04	1.0E-93	AB037832.1	NT	Homo sapiens mRNA for KIAA1411 protein, partial cds
6971	16848	27039	1.18	1.0E-93	Y10183.1	NT	H.sapiens mRNA for MEMD protein
7024	16901	27093	1.59	1.0E-93	AF182032.1	NT	Homo sapiens protein kinase inhibitor gamma (PKIG) mRNA, complete cds
7437	16450	26640	1.8	1.0E-93	AB040918.1	NT	Homo sapiens Trio isoform mRNA, complete cds
7440	16453	26643	1.22	1.0E-93	AF091395.1	NT	
7529	17380	27589	4.54	1.0E-93	X13474.1	NT	Human PreA4 gene for Alzheimer's disease A4 amyloid protein precursor (exon 9)
7529	17380	27590	4.54	1.0E-93	X13474.1	NT	Human PreA4 gene for Alzheimer's disease A4 amyloid protein precursor (exon 9)
9051	19494	25132	5.92	1.0E-93	A1268262.1	EST_HUMAN	qm03c12.x1 NCJ_CGAP_Lu6 Homo sapiens cDNA clone IMAGE:1880758 3' similar to WP:T19B4.4
9716	19257		2.33	1.0E-93	11417856	NT	CE13742.1
8025	17875		1.22	8.0E-94	AL163209.2	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2), mRNA
3880	13791	23579	1.74	6.0E-94	AF142482.1	NT	Homo sapiens chromosome 21 segment HS21C009
9830	19331		1.67	6.0E-94	AB014512.1	NT	Homo sapiens transcription enhancer factor-5 mRNA, complete cds
5296	15217	25019	3.05	5.0E-94	AB014512.1	NT	Homo sapiens mitogen-activated protein kinase 12 (MAPK12), mRNA
5296	15217	25020	3.05	5.0E-94	AB014512.1	NT	Homo sapiens mRNA for KIAA0612 protein, partial cds
5689	15598	25699	1.72	5.0E-94	AA722434.1	EST_HUMAN	Homo sapiens mRNA for KIAA0612 protein, partial cds
6183	16069	26218	1.63	5.0E-94	A1015800.1	EST_HUMAN	zgb7g06.s1 Soares_fetal_heart_Nb1H19W Homo sapiens cDNA clone IMAGE:409594 3'
9361	19736	24911	4.68	5.0E-94	T89398.1	EST_HUMAN	ot83d05.s1 Soares_fetal_heart_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:1623369 3'
9901	19378		1.27	5.0E-94	D25217.2	NT	yd8b04.s1 Soares_fetal_liver_spleen_1N1LS Homo sapiens cDNA clone IMAGE:116239 3'
9907	19384		1.26	5.0E-94		NT	Homo sapiens mRNA for KIAA0027 protein, partial cds
1799	11697		4.55	4.0E-94	L05094.1	NT	Homo sapiens cleavage and polyadenylation specific factor 1, 160kD subunit (CPSF1), mRNA
2621	12489	22379	0.86	4.0E-94	4506008	NT	Homo sapiens ribosomal protein L27 mRNA, complete cds
4618	14506	24295	3.02	4.0E-94	A1591312.1	EST_HUMAN	Homo sapiens protein phosphatase 1, regulatory subunit 10 (PPP1R10) mRNA
5892	15798	25921	1.84	4.0E-94	11440670	NT	tw11f10.x1 NCJ_CGAP_Brr52 Homo sapiens cDNA clone IMAGE:2259403 3' similar to TR:Q15265 Q15265
5892	15798	25922	1.84	4.0E-94	11440670	NT	PROTEIN TYROSINE PHOSPHATASE ;
9749	17898	28142	1.72	4.0E-94	11545792	NT	Homo sapiens solute carrier family 22 (organic cation transporter), member 1-like (SLC22A1L), mRNA
595	10531	20339	1.17	3.0E-94	AB022785.1	NT	Homo sapiens solute carrier family 22 (organic cation transporter), member 1-like (SLC22A1L), mRNA
704	10637	20482	1.17	3.0E-94	4502506	NT	Homo sapiens hypophthal protein FLJ12455 (FLJ12455), mRNA
1706	11607	21477	1.05	3.0E-94	AF167706.1	NT	Homo sapiens ASH2L gene, complete cds, similar to Drosophila ash2 gene
1706	11607	21478	1.05	3.0E-94	AF167706.1	NT	Homo sapiens complement component 5 (C5) mRNA
1706	11607	21478	1.05	3.0E-94	AF167706.1	NT	Homo sapiens cysine-rich repeat-containing protein S62 precursor, mRNA, complete cds

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Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1735	11636	21504	3.45	3.0E-94	4557556	NT	Homo sapiens E1A binding protein p300 (EP300) mRNA
4095	13995	23772	0.82	3.0E-94	AA464805.1	EST_HUMAN	zw63g08.r1 Soares total Tetus Nb2HF8 9w Homo sapiens cDNA clone IMAGE:774782 5'
5484	15403	25466	3.58	3.0E-94	11496288	NT	Homo sapiens zinc finger protein 277 (ZNF277), mRNA
5881	15787	25909	4.16	3.0E-94	11526228	NT	Homo sapiens chromosome 21 open reading frame 18 (C21ORF18), mRNA
6771	16650	26838	1.16	3.0E-94	AF152303.1	NT	Homo sapiens probocadherin alpha 13 (PCDH-alpha13) mRNA, complete cds
6992	18689	27062	3.79	3.0E-94	AB014579.1	NT	Homo sapiens mRNA for KIAA0679 protein, partial cds
7533	17384	27596	4.36	3.0E-94	AF087942.1	NT	Homo sapiens glycogenin-1L mRNA, complete cds
8448	18321	28380	1.75	3.0E-94	4757821	NT	Homo sapiens axonal transport of synaptic vesicles (ATSV) mRNA
8928	18736	29029	2.27	3.0E-94	U26711.1	NT	Human cbl-b truncated form 1 lacking leucine zipper mRNA, complete cds
143	10117	19937	2.24	1.0E-94	BE295714.1	EST_HUMAN	601175762F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3531038 5'
3050	12977	22769	1.91	1.0E-94	BE253433.1	EST_HUMAN	601117696F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3352559 5'
3050	12977	22770	1.91	1.0E-94	BE253433.1	EST_HUMAN	601117696F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3352559 5'
4261	14160	23938	1.13	1.0E-94	9506682	NT	Homo sapiens hypothetical protein (FLJ20746), mRNA
7331	17235	27439	1.93	1.0E-94	11428710	NT	Homo sapiens paired box gene 5 (B-cell lineage specific activator protein) (PAX5), mRNA
7636	17487	27707	1.41	1.0E-94	BE780478.1	EST_HUMAN	601468748F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3872069 5'
9418	18292	28546	2.49	1.0E-94	U65590.1	NT	Homo sapiens IL-1 receptor antagonist IL-1Ra (IL-1RN) gene, alternatively spliced forms, complete cds
8635	18500	28775	2.19	1.0E-94	A1272244.1	EST_HUMAN	ap22e02.x1 Schiller oligodendrogloma Homo sapiens cDNA clone IMAGE:1956122 3' similar to TR:Q62845
9759	10117	19937	1.98	1.0E-94	BE295714.1	EST_HUMAN	Q62845 NEURAL CELL ADHESION PROTEIN BIG-2 PRECURSOR. ;
1461	11366	21230	1.55	9.0E-95	AF027302.1	NT	601175762F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3531038 5'
3118	13043	22839	1.13	9.0E-95	7662027	NT	Homo sapiens TNF-alpha stimulated ABC protein (ABC50) mRNA, complete cds
3118	13043	22840	1.13	9.0E-95	7662027	NT	Homo sapiens KIAA0255 gene product (KIAA0255), mRNA
6801	16680	28669	1.87	9.0E-95	AF274753.1	NT	Homo sapiens KIAA0255 gene product (KIAA0255), mRNA
4436	14331	24119	1.59	8.0E-95	A1700998.1	EST_HUMAN	Homo sapiens progressive ankylosis-like protein (ANK) mRNA, complete cds
4436	14331	24120	1.59	8.0E-95	A1700998.1	EST_HUMAN	we09e04.x1 NCL CGAP_Lu24 Homo sapiens cDNA clone IMAGE:2340806 3' similar to gb:K00558
6294	16158	26314	1.83	8.0E-95	11426529	NT	TUBULIN ALPHA-1 CHAIN (HUMAN);
6294	16158	26315	1.83	8.0E-95	11426529	NT	TUBULIN ALPHA-1 CHAIN (HUMAN);
6770	16649	26837	2.05	8.0E-95	AF032897.1	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, non-ATPase, 11 (PSMD11), mRNA
7391	17309	27515	1.73	8.0E-95	11420944	NT	Homo sapiens proteasome (prosome, macropain) 26S subunit, non-ATPase, 11 (PSMD11), mRNA
7391	17309	27516	1.73	8.0E-95	11420944	NT	Homo sapiens poliovirus channel subunit (HERG-3) mRNA, complete cds
7667	17517	27744	2.82	8.0E-95	5174644	NT	Homo sapiens KIAA0255 gene product (KIAA0255), mRNA
							Homo sapiens KIAA0255 gene product (KIAA0255), mRNA
							Homo sapiens proline dehydrogenase (proline oxidase) (PRODH) mRNA

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Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7681	17631		2.83	8.0E-95	AB037816.1	NT	Homo sapiens mRNA for KIAA1395 protein, partial cds
8096	17987	28236	2.41	8.0E-95	AF112152.1	NT	Homo sapiens developmental arteries and neural crest EGF-like protein mRNA, complete cds
9689	19242		8.68	8.0E-95	AA629056.1	EST_HUMAN	zu84b01.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:744649 3' similar to contains L1.1 L1 repetitive element:
274	10240	20058	9.46	7.0E-95	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
274	10240	20059	9.46	7.0E-95	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
4270	14169	23947	5.94	7.0E-95	M95708.1	NT	Homo sapiens Ly-6-like protein (CD59) mRNA, complete cds
4316	14213		1.38	7.0E-95	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
4982	14857	24823	1.03	7.0E-95	M95929.1	NT	Human homeobox protein (PHOX1) mRNA, 3' end
5340	15261	25087	1.76	3.0E-95	BF526041.1	EST_HUMAN	602071146F1 NCL CGAP_Bn64 Homo sapiens cDNA clone IMAGE:4214147 5'
922	10847	20694	0.86	2.0E-95	4504374	NT	Homo sapiens H factor 1 (complement) (HF1) mRNA
1625	11529	21387	1.6	2.0E-95	7662027	NT	Homo sapiens KIAA0255 gene product (KIAA0255), mRNA
1625	11529	21388	1.6	2.0E-95	7662027	NT	Homo sapiens KIAA0255 gene product (KIAA0255), mRNA
1897	11793	21672	7.79	2.0E-95	4507512	NT	Homo sapiens tissue inhibitor of metalloproteinase 3 (Sorsby fundus dystrophy, pseudoinflammatory) (TIMP3) mRNA
1900	11796	21676	3.3	2.0E-95	BE393873.1	EST_HUMAN	601312161F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3658862 5'
2376	12256	22147	1.3	2.0E-95	5453665	NT	Homo sapiens G protein-coupled receptor 19 (GPR19) mRNA
2376	12256	22148	1.3	2.0E-95	5453665	NT	Homo sapiens G protein-coupled receptor 19 (GPR19) mRNA
2417	12294	22191	16.55	2.0E-95	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
2466	12342	22235	2.46	2.0E-95	4758423	NT	Homo sapiens glycine cleavage system protein H (aminomethyl carrier) (GCSH) mRNA
2787	10846	20693	0.86	2.0E-95	4504374	NT	Homo sapiens H factor 1 (complement) (HF1) mRNA
3120	13045	22842	3.51	2.0E-95	AF015452.1	NT	Homo sapiens Usurpin-gamma mRNA, complete cds
3517	13433	23232	2.78	2.0E-95	7705600	NT	Homo sapiens unconventional myosin-15 (LOC51168), mRNA
3517	13433	23233	2.78	2.0E-95	7705600	NT	Homo sapiens unconventional myosin-15 (LOC51168), mRNA
3565	13479	23268	0.96	2.0E-95	AB037807.1	NT	Homo sapiens mRNA for KIAA1386 protein, partial cds
3690	13604	23360	1.02	2.0E-95	AI290264.1	EST_HUMAN	qm01c02.x1 Soares_NhHMPu_S1 Homo sapiens cDNA clone IMAGE:1880546 3' similar to WP.T23G7.4 CE03708;
4264	14163	23940	2.3	2.0E-95	7657185	NT	Homo sapiens hypothetical protein (HS322B1A), mRNA
4971	14846	24615	2.57	2.0E-95	7661979	NT	Homo sapiens KIAA0187 gene product (KIAA0187), mRNA
5022	14895	24863	0.98	2.0E-95	AA447931.1	EST_HUMAN	zx11407.r1 Soares_total_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:786157 5'
5022	14895	24864	0.98	2.0E-95	AA447931.1	EST_HUMAN	zx11407.r1 Soares_total_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:786157 5'
5367	15287	25121	3.69	2.0E-95	7705764	NT	Homo sapiens CGI-48 protein (LOC51096), mRNA
5367	15287	25122	3.69	2.0E-95	7705764	NT	Homo sapiens CGI-48 protein (LOC51096), mRNA

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5734	15642	25748	4.54	2.0E-95	M59724.1	NT	Human muscle-type phosphofructokinase (PFK-M) gene, exon 7
5957	15862	25984	2.25	2.0E-95	AF257737.1	NT	Homo sapiens ciliary dynein heavy chain 9 (DNAH9) mRNA, complete cds
6055	16038	26179	1.82	2.0E-95	11435773	NT	Homo sapiens huntingtin (Huntington disease) (HD), mRNA
8106	17996	28245	2.36	2.0E-95	4757853	NT	Homo sapiens bone morphogenetic protein receptor, type IA (BMPRI1A) mRNA
9452	19084	25285	1.98	2.0E-95	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
9940	19338	25211	4.34	2.0E-95	11418164	NT	Homo sapiens adenylosuccinate lyase (ADSL), mRNA
5450	15371	25427	7.73	1.0E-95	AA284851.1	EST_HUMAN	z123h04.r1 Soares ovary tumor Nb-HOT Homo sapiens cDNA clone IMAGE:714007 5' similar to TR:G1067084 G1067084 F55H2.6 ;
5450	15371	25428	7.73	1.0E-95	AA284851.1	EST_HUMAN	z123h04.r1 Soares ovary tumor Nb-HOT Homo sapiens cDNA clone IMAGE:714007 5' similar to TR:G1067084 G1067084 F55H2.6 ;
6437	16298	26460	4.85	1.0E-95	BF370000.1	EST_HUMAN	RC6-FN0019-290600-011-G11 FN0019 Homo sapiens cDNA
6437	16298	26461	4.85	1.0E-95	BF370000.1	EST_HUMAN	RC6-FN0019-290600-011-G11 FN0019 Homo sapiens cDNA
6767	16846	26835	1.87	9.0E-96	BE697259.1	EST_HUMAN	601437232F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3922423 5'
435	12666	20201	0.82	8.0E-96	BE907607.1	EST_HUMAN	601497608F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3899761 5'
435	12666	20202	0.82	8.0E-96	BE907607.1	EST_HUMAN	601497608F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3899761 5'
5383	15302		2.66	8.0E-96	AW836047.1	EST_HUMAN	PM0.LT0019-090300-002-d09 LT0019 Homo sapiens cDNA
3834	13746	23538	0.95	7.0E-96	AF231920.1	NT	Homo sapiens chromosome 21 unknown mRNA
2213	12099	22003	0.85	6.0E-96	BE171984.1	EST_HUMAN	MRO-HIT0559-250200-002-d07 HT0559 Homo sapiens cDNA
3276	13197	22997	0.96	6.0E-96	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
3437	13354	23159	26.15	6.0E-96	M26873.1	NT	Human glyceraldehyde-3-phosphate dehydrogenase pseudogene 3'end
8831	18644	28927	1.98	6.0E-96	7662289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
8831	18644	28928	1.98	6.0E-96	7662289	NT	Homo sapiens KIAA0763 gene product (KIAA0763), mRNA
8870	18682	28972	2.09	6.0E-96	8923939	NT	Homo sapiens myosin, heavy polypeptide 2, skeletal muscle, adult (MYH2), mRNA
317	10279	20096	2.7	5.0E-96	AB032998.1	NT	Homo sapiens mRNA for KIAA1172 protein, partial cds
824	10751	20599	3.06	5.0E-96	AB032998.1	NT	Homo sapiens mRNA for KIAA1172 protein, partial cds
824	10751	20600	3.06	5.0E-96	AB032998.1	NT	Homo sapiens mRNA for KIAA1172 protein, partial cds
2576	12447		2.31	5.0E-96	11416767	NT	Homo sapiens phosphodiesterase 6A, cGMP-specific, rod, alpha (PDE6A), mRNA
2991	12919	22713	0.98	5.0E-96	6912735	NT	Homo sapiens transient receptor potential channel 5 (TRPC5), mRNA
4810	14694		1.22	5.0E-96	X60812.1	NT	H.sapiens DNA for monamine oxidase type A (7) (partial)
6065	16048	26193	4.23	5.0E-96	11424399	NT	Homo sapiens A kinase (PRKA) anchor protein 1 (AKAP1), mRNA
6065	16048	26194	4.23	5.0E-96	11424399	NT	Homo sapiens A kinase (PRKA) anchor protein 1 (AKAP1), mRNA
6719	16599	26788	1.81	5.0E-96	M68347.1	NT	Human type IV collagenase (CLG4B) gene, exon 5
6719	16599	26789	1.81	5.0E-96	M68347.1	NT	Human type IV collagenase (CLG4B) gene, exon 5

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4097	13997		6.22	3.0E-96	H68656.1	EST_HUMAN	y87h12.1 Soares fetal liver spleen TNF1S Homo sapiens cDNA clone IMAGE:212327 5'
409	10355		3.49	2.0E-96	4503098	NT	Homo sapiens chondroitin sulfate proteoglycan 4 (melanoma-associated) (CSPG4), mRNA
730	10662	20494	1.56	2.0E-96	AL163248.2	NT	Homo sapiens chromosome 21 segment HS21C048
4651	14537	24326	1.58	2.0E-96	BE143074.1	EST_HUMAN	RC3-H10230-040500-110-g02 HT0230 Homo sapiens cDNA
7191	17068		5.08	2.0E-96	AV689461.1	EST_HUMAN	AV689461 GKC Homo sapiens cDNA clone GKCFMD07 5'
9151	18902		2.05	2.0E-96	AW249440.1	EST_HUMAN	2819351.5prime NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2819351 5'
655	10590	20408	1.89	1.0E-96	Y18890.1	NT	Human endogenous retrovirus type K (HERV-K), gag, pol and env genes
1742	11643	21510	2.03	1.0E-96	AW955054.1	EST_HUMAN	EST367124 MAGC resequencing, MAGC Homo sapiens cDNA
1742	11643	21511	2.03	1.0E-96	AW955054.1	EST_HUMAN	EST367124 MAGC resequencing, MAGC Homo sapiens cDNA
1806	11703	21580	0.89	1.0E-96	4503756	NT	Homo sapiens flavin containing monooxygenase 2 (FMO2) mRNA
1806	11703	21581	0.89	1.0E-96	4503756	NT	Homo sapiens flavin containing monooxygenase 2 (FMO2) mRNA
2181	12068	21969	1.33	1.0E-96	M75967.1	NT	Human hepatocyte growth factor gene, exon 1
2181	12068	21970	1.33	1.0E-96	M75967.1	NT	Human hepatocyte growth factor gene, exon 1
2219	12650	22009	1.88	1.0E-96	U51472.2	NT	Felis catus superfast myosin heavy chain (sMVHC) mRNA, complete cds
7058	16935	27125	20.65	1.0E-96	11419429	NT	Homo sapiens similar to actonucleotide pyrophosphatase/phosphodiesterase 3 (H. sapiens) (LOC63214), mRNA
7138	17015	27208	1.98	1.0E-96	AF274863.1	NT	Homo sapiens secretory pathway component Sec31B-1 mRNA, alternatively spliced, complete cds
7843	17693	27938	1.64	1.0E-96	AB033116.1	NT	Homo sapiens mRNA for KIAA1290 protein, partial cds
7843	17693	27939	1.64	1.0E-96	AB033116.1	NT	Homo sapiens mRNA for KIAA1290 protein, partial cds
3285	13206	23006	0.95	6.0E-97	BF245240.1	EST_HUMAN	601863712F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4081202 5'
6459	16319		2.75	6.0E-97	BE141849.1	EST_HUMAN	IL5-HT0117-01:1099-004-D07 HT0117 Homo sapiens cDNA
6672	16552	26747	1.76	5.0E-97	AL043314.2	EST_HUMAN	DKFZp434N0323_1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434N0323 5'
6735	16614	26804	10.79	5.0E-97	AA18026.1	EST_HUMAN	zv97e12.s1 Soares NIH-MP_u_S1 Homo sapiens cDNA clone IMAGE:767758 3' similar to TR:G1304125
7578	17429	27643	2.76	5.0E-97	BF154912.1	EST_HUMAN	G1304125 PMS4 MRNA ;
8832	18645	28929	1.87	5.0E-97	BE148597.1	EST_HUMAN	RC0-BT0812-250900-032-a09 BT0812 Homo sapiens cDNA
8832	18645	28930	1.87	5.0E-97	BE148597.1	EST_HUMAN	MRO-HT0241-150500-010-b02 HT0241 Homo sapiens cDNA
924	10849	20697	1.26	4.0E-97	BE004436.1	EST_HUMAN	MRO-HT0241-150500-010-b02 HT0241 Homo sapiens cDNA
1868	11764	21638	1.08	4.0E-97	5453572	NT	QMO-BN0106-170300-293-a06 BN0106 Homo sapiens cDNA
6082	16027	26167	6.1	4.0E-97	Y11339.2	NT	Homo sapiens brefeldin A-inhibited guanine nucleotide-exchange protein 2 (BIG2), mRNA
6082	16027	26168	6.1	4.0E-97	Y11339.2	NT	Homo sapiens mRNA for GalNAc alpha-2, 6-sialyltransferase I, long form
6867	16746	26939	1.41	4.0E-97	11421793	NT	Homo sapiens mRNA for GalNAc alpha-2, 6-sialyltransferase I, long form
7328	17232	27433	1.17	4.0E-97	AB011166.1	NT	Homo sapiens v-src avian sarcoma (Schmidt-Ruppin A-2) viral oncogene homolog (SRC), mRNA
							Homo sapiens mRNA for KIAA0564 protein, partial cds

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7328	17232	27434	1.17	4.0E-97	AB011166.1	NT	Homo sapiens mRNA for KIAA0594 protein, partial cds
8503	18376	28641	1.76	4.0E-97	11863122	NT	Homo sapiens AXL receptor tyrosine kinase (AXL), transcript variant 1, mRNA
8503	18376	28642	1.76	4.0E-97	11863122	NT	Homo sapiens AXL receptor tyrosine kinase (AXL), transcript variant 1, mRNA
8733	17882	28124	15.68	4.0E-97	AB042557.1	NT	Homo sapiens mRNA, similar to rat myomegalin, complete cds
8736	17885	28128	2.31	4.0E-97	AB033116.1	NT	Homo sapiens mRNA for KIAA1290 protein, partial cds
8736	17885	28129	2.31	4.0E-97	AB033116.1	NT	Homo sapiens mRNA for KIAA1290 protein, partial cds
9331	19012		3.83	4.0E-97	11418318	NT	Homo sapiens G-2 and S-phase expressed 1 (GTSE1), mRNA
243	10210	20026	1.17	3.0E-97	AB032908.1	NT	Homo sapiens mRNA for KIAA1172 protein, partial cds
856	10783	20633	10.96	3.0E-97	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
856	10783	20634	10.96	3.0E-97	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
1423	12694	21195	1.77	3.0E-97	4758813	NT	Homo sapiens N-myc (and STAT) interactor (NMI), mRNA
2389	12682	22161	1.92	3.0E-97	U36255.1	NT	Human beta-prime-adaptin (BAM22) gene, exon 7
3223	13147	22948	1.14	3.0E-97	5174478	NT	Homo sapiens pericentrin (PCNT) mRNA
4670	14556	24349	12.55	1.0E-97	4503470	NT	Homo sapiens eukaryotic translation elongation factor 1 alpha 1 (EEF1A1) mRNA
5872	15778	25897	2.19	1.0E-97	BE566486.1	EST_HUMAN	601339520F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3681821 5'
8088	17979	28229	3.41	1.0E-97	11427757	NT	Homo sapiens KIAA0649 gene product (KIAA0649), mRNA
8088	17979	28230	3.41	1.0E-97	11427757	NT	Homo sapiens KIAA0649 gene product (KIAA0649), mRNA
8629	18494	28768	2.82	1.0E-97	AA553761.1	EST_HUMAN	nk29g02.s1 NCL_CGAP_Co11 Homo sapiens cDNA clone IMAGE:1014962 3'
8763	17912	28156	13.54	1.0E-97	11426272	NT	Homo sapiens ribosomal protein S15 (RPS15), mRNA
8763	17912	28157	13.54	1.0E-97	11426272	NT	Homo sapiens ribosomal protein S15 (RPS15), mRNA
883	10809	20658	8	9.0E-98	BE090973.1	EST_HUMAN	PM4-BT0724-010400-008-a12 BT0724 Homo sapiens cDNA
1255	11182	21012	1.29	9.0E-98	8393092	NT	Homo sapiens cat eye syndrome critical region gene 1 (CECR1), mRNA
6623	16503	28591	4.74	9.0E-98	4758119	NT	Homo sapiens death-associated protein (DAP), mRNA
6623	16503	28592	4.74	9.0E-98	4758119	NT	Homo sapiens death-associated protein (DAP), mRNA
7271	17148	27342	2.77	9.0E-98	X06989.1	NT	Human mRNA for amyloid A4(751) protein
7319	17195	27395	2.41	9.0E-98	11321580	NT	Homo sapiens succinate-CoA ligase, GDP-forming, alpha subunit (SUCLG1), mRNA
7355	17223	27423	1.39	9.0E-98	AB037786.1	NT	Homo sapiens mRNA for KIAA1365 protein, partial cds
8369	18246	28497	2.24	9.0E-98	AB023222.1	NT	Homo sapiens mRNA for KIAA1005 protein, partial cds
8369	18246	28498	2.24	9.0E-98	AB023222.1	NT	Homo sapiens mRNA for KIAA1005 protein, partial cds
9345	10809	20658	4.97	9.0E-98	BE090973.1	EST_HUMAN	PM4-BT0724-010400-008-a12 BT0724 Homo sapiens cDNA
1350	11256	21112	0.89	8.0E-98	AB033768.1	NT	Homo sapiens hPAD-colony10 mRNA for peptidylarginine deiminase type I, complete cds
1540	11444	21303	1.04	8.0E-98	5031810	NT	Homo sapiens IL2-inducible T-cell kinase (ITK), mRNA

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1540	11444	21304	1.04	8.0E-98	5031810	NT	Homo sapiens IL2-inducible T-cell kinase (ITK), mRNA
1695	11597	21468	0.98	8.0E-98	AB017007.1	NT	Homo sapiens PMS2L16 mRNA, partial cds
1695	11597	21469	0.98	8.0E-98	AB017007.1	NT	Homo sapiens PMS2L16 mRNA, partial cds
3726	13638	23424	5.03	8.0E-98	J04499.1	NT	Human mitochondrial creatine kinase (CKMT) gene, complete cds
5049	14921		0.88	8.0E-98	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
9717	19288	28220	1.29	4.0E-98	BE348727.1	EST_HUMAN	h68f02.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3151899 3'
2131	12019	21917	1.21	3.0E-98	AJ403124.1	EST_HUMAN	AJ403124 3.4 (downregulated in larynx carcinoma) Homo sapiens cDNA clone 18
2565	12436	22329	1.85	3.0E-98	AB014607.1	NT	Homo sapiens mRNA for KIAA0707 protein, partial cds
2720	12582		2.09	3.0E-98	AA077498.1	EST_HUMAN	7B18H01 Chromosome 7 Fetal Brain cDNA Library Homo sapiens cDNA clone 7B18H01
6147	16020	26159	1.7	3.0E-98	11419210	NT	Homo sapiens activator of S phase kinase (ASK), mRNA
6147	16020	26160	1.7	3.0E-98	11419210	NT	Homo sapiens activator of S phase kinase (ASK), mRNA
7083	16960	27153	3.31	3.0E-98	H46698.1	EST_HUMAN	yc1709.1 Soares adult brain N2b51B55Y Homo sapiens cDNA clone IMAGE:178240 5'
7685	17535	27759	1.6	3.0E-98	AJ403124.1	EST_HUMAN	AJ403124 3.4 (downregulated in larynx carcinoma) Homo sapiens cDNA clone 18
7685	17535	27760	1.6	3.0E-98	AJ403124.1	EST_HUMAN	AJ403124 3.4 (downregulated in larynx carcinoma) Homo sapiens cDNA clone 18
8322	18199	28448	5.15	3.0E-98	U59309.1	NT	Human fumarylase precursor (FH) mRNA, nuclear gene encoding mitochondrial protein, complete cds
9895	19373		2.47	3.0E-98	11418177	NT	Homo sapiens Ran GTPase activating protein 1 (RANGAP1), mRNA
2033	11924	21816	29.05	2.0E-98	BE294281.1	EST_HUMAN	601172658F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3628134 5'
2191	12078	21983	1.45	2.0E-98	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
4199	14099	28880	0.96	2.0E-98	AF032897.1	NT	Homo sapiens potassium channel subunit (HERG-3) mRNA, complete cds
4244	14143	23916	4.94	2.0E-98	4758831	NT	Homo sapiens fatty-acid-Coenzyme A ligase, long-chain 4 (FACL4) mRNA
4720	14606	24390	1.51	2.0E-98	AF218902.1	NT	Homo sapiens attractin precursor (ATRIN) gene, exon 16
4720	14606	24391	1.51	2.0E-98	AF218902.1	NT	Homo sapiens attractin precursor (ATRIN) gene, exon 16
5069	14939	24711	6.39	2.0E-98	9055269	NT	Homo sapiens low density lipoprotein receptor related protein-deleted in tumor (LRPDI), mRNA
5069	14939	24712	6.39	2.0E-98	9055269	NT	Homo sapiens low density lipoprotein receptor related protein-deleted in tumor (LRPDI), mRNA
5163	15029	24795	1.09	2.0E-98	4758975	NT	Homo sapiens protein tyrosine kinase 2 beta (PTK2B) mRNA
5503	15224	25028	4.66	2.0E-98	7706512	NT	Homo sapiens PDZ domain-containing guanine nucleotide exchange factor 1 (LOC51735), mRNA
7004	16881	27073	3.87	2.0E-98	11428813	NT	Homo sapiens SH3-domain GRB2-like 2 (SH3GL2), mRNA
7004	16881	27074	3.87	2.0E-98	11428813	NT	Homo sapiens SH3-domain GRB2-like 2 (SH3GL2), mRNA
7497	17367	27572	1.5	2.0E-98	X12664.1	NT	H.sapiens arginase gene exon 3 (EC 3.5.3.1)
7951	17801		1.18	2.0E-98	7705668	NT	Homo sapiens AIM-1 protein (LOC51151), mRNA
9350	19026	25301	1.43	2.0E-98	11435947	NT	Homo sapiens chromosome 12 open reading frame 3 (C12ORF3), mRNA
399	10345	20172	18.93	1.0E-98	AI862007.1	EST_HUMAN	tw36b04.x1 NCI_CGAP_UH1 Homo sapiens cDNA clone IMAGE:2261743 3' similar to SW:RL2B_HUMAN P29316 60S RIBOSOMAL PROTEIN L23A. ;

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447	10391	20212	2.38	1.0E-98	AW988611.1	EST_HUMAN	PM0-BN0066-100300-001-c06 BN0065 Homo sapiens cDNA
1756	11655	21526	15.96	1.0E-98	N49818.1	EST_HUMAN	W23105.1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:243585 5' similar to PIR:S54204 S54204 ribosomal protein L29 - human ;
5256	15178	24953	6.96	1.0E-98	AA195854.1	EST_HUMAN	zp98c09.11 Stratagene muscle 937209 Homo sapiens cDNA clone IMAGE:628240 5' similar to TR:G806562 G806562 NEBULIN ;
7203	17080	27266	1.36	1.0E-98	AF141349.1	NT	Homo sapiens beta-tubulin mRNA, complete cds
7203	17080	27267	1.36	1.0E-98	AF141349.1	NT	Homo sapiens beta-tubulin mRNA, complete cds
5681	15590	25992	4.29	9.0E-99	AW968635.1	EST_HUMAN	EST380711 MAGC resequences, MAGJ Homo sapiens cDNA
8465	18338	28602	2.6	9.0E-99	AI479829.1	EST_HUMAN	tm99h07.x1 NCL CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2163421 3' similar to SW:BD_HUMAN P55957 BH3 INTERACTING DOMAIN DEATH AGONIST ;
8465	18338	28603	2.6	9.0E-99	AI479829.1	EST_HUMAN	tm99h07.x1 NCL CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2163421 3' similar to SW:BD_HUMAN P55957 BH3 INTERACTING DOMAIN DEATH AGONIST ;
8716	18533	28817	1.84	9.0E-99	AA134604.1	EST_HUMAN	zn90d02.11 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone IMAGE:565443 5' similar to TR:G682994 G682994 GPI-ANCHORED PROTEIN P137. ;
7065	16942	27134	1.19	8.0E-99	9635487	NT	Human endogenous retrovirus, complete genome
5561	15477	25550	9.2	7.0E-99	AF035808.1	NT	Homo sapiens oscillin (hLn) gene, exon 5
8884	18695	28988	2.31	7.0E-99	AF001886.1	NT	Homo sapiens NK-receptor (KIR-G2) gene, linker region exon
2080	11970	21863	0.93	6.0E-99	11430555	NT	Homo sapiens cysteine-rich repeat-containing protein S62 precursor, (LOC51232), mRNA
2080	11970	21864	0.93	6.0E-99	11430555	NT	Homo sapiens cysteine-rich repeat-containing protein S62 precursor, (LOC51232), mRNA
3814	13726	23517	1.87	6.0E-99	AW976864.1	EST_HUMAN	EST388473 MAGC resequences, MAGN Homo sapiens cDNA
4642	14530	24318	1.16	6.0E-99	4502660	NT	Homo sapiens CD34 antigen (CD34) mRNA
6013	15917	26047	2.36	6.0E-99	L43610.1	NT	Homo sapiens polycystic kidney disease (PKD1) gene, exons 27-30
6013	15917	26048	2.36	6.0E-99	L43610.1	NT	Homo sapiens polycystic kidney disease (PKD1) gene, exons 27-30
6718	16598	26787	1.21	6.0E-99	X99101.1	NT	H.sapiens mRNA for estrogen receptor
7089	16966	27160	2.18	6.0E-99	AB036429.1	NT	Homo sapiens NDST4 mRNA for N-deacetylase/N-sulfotransferase 4, complete cds
7143	17020	27213	3.57	6.0E-99	AF080255.1	NT	Homo sapiens lodesar protein mRNA, complete cds
7143	17020	27214	3.57	6.0E-99	AF080255.1	NT	Homo sapiens lodesar protein mRNA, complete cds
8102	17992	28241	3.72	6.0E-99	11526299	NT	Homo sapiens BH3 interacting domain death agonist (BID), mRNA
902	10827	20671	0.86	5.0E-99	U35464.1	NT	Human protein C inhibitor (PCI-B) mRNA, complete cds
902	10827	20672	0.86	5.0E-99	U35464.1	NT	Human protein C inhibitor (PCI-B) mRNA, complete cds
1922	11817	21696	2.36	5.0E-99	Y11365.1	NT	H.sapiens IMPA gene, exon 8
4463	14357	24148	1.35	5.0E-99	AF009660.1	NT	Homo sapiens T cell receptor beta locus, TORBV7S3A2 to TORBV12S2 region
5066	14936	24709	2.46	5.0E-99	4758697	NT	Homo sapiens mannosidase, alpha, class 2A, member 1 (MAN2A1), mRNA
9360	19032		2.1	5.0E-99	BE890177.1	EST_HUMAN	601513157F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3914391 5'

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6844	15723		5.37	3.0E-99	M95596.1	NT	Human E2A/HLA fusion protein (E2A/HLF) mRNA, complete cds
1219	11128		3.46	2.0E-99	AW274792.1	EST_HUMAN	xp09e06.x1 NCI CGAP HN9 Homo sapiens cDNA clone IMAGE:2739874 3' similar to gb:M31212 MYOSIN LIGHT CHAIN ALKALI, NON-MUSCLE ISOFORM (HUMAN);
3220	13144	22947	1.08	2.0E-99	M30938.1	NT	Human Ku (p70/p80) subunit mRNA, complete cds
4443	14337	24127	3.15	2.0E-99	AF095703.1	NT	Homo sapiens short chain L-3-hydroxyacyl-CoA dehydrogenase precursor (HADHSC) gene, nuclear gene encoding mitochondrial protein, complete cds
7053	19930	27121	9.75	2.0E-99	W23507.1	EST_HUMAN	zb46d06.r1 Soares_fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:306635 5' similar to gb:M16182 BETA-GLUCURONIDASE PRECURSOR (HUMAN);
8451	18324	28583	3.83	2.0E-99	AF247457.2	NT	Homo sapiens myosin X (MYO10) mRNA, complete cds
312	10274	20093	1.53	1.0E-99	AF114487.1	NT	Homo sapiens intersecin long isoform (TSN) mRNA, complete cds
375	10329	20152	1.04	1.0E-99	11526150	NT	Homo sapiens GA-binding protein transcription factor, alpha subunit (60kD) (GABPA), mRNA
1401	11306	21166	2.11	1.0E-99	M30938.1	NT	Human Ku (p70/p80) subunit mRNA, complete cds
1537	11441	21298	1.47	1.0E-99	AF192523.1	NT	Homo sapiens truncated Niemann-Pick C3 protein (NPC3) mRNA, complete cds
1537	11441	21299	1.47	1.0E-99	AF192523.1	NT	Homo sapiens truncated Niemann-Pick C3 protein (NPC3) mRNA, complete cds
1885	11781	21656	1.1	1.0E-99	4503730	NT	Homo sapiens FK506-binding protein 6 (36kD) (FKBP6) mRNA, and translated products
1885	11781	21657	1.1	1.0E-99	4503730	NT	Homo sapiens FK506-binding protein 6 (36kD) (FKBP6) mRNA, and translated products
3046	12973	22766	0.89	1.0E-99	J03171.1	NT	Human interferon-alpha receptor (HuIFN-alpha-Rec) mRNA, complete cds
4283	14182	23960	2.74	1.0E-99	AF096018.1	NT	Homo sapiens fatty acid amide hydrolase (FAAH) gene, exon 14
4283	14182	23961	2.74	1.0E-99	AF096018.1	NT	Homo sapiens fatty acid amide hydrolase (FAAH) gene, exon 14
5200	15063		1.18	1.0E-99	AL163281.2	NT	Homo sapiens chromosome 21 segment HS21C081
7305	17181		1.15	1.0E-99	11419721	NT	Homo sapiens ALEX1 protein (LOC51309), mRNA
7483	17353	27557	1.68	1.0E-99	AW340174.1	EST_HUMAN	hd02h02.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2908371 3' similar to TR:O02711
8683	18571	28854	2.4	1.0E-99	AB023222.1	NT	O02711 PRO-POL-DUTPASE POLYPROTEIN ;
9125	18884						Homo sapiens mRNA for KIAA1005 protein, partial cds
9125	18884		3.76	1.0E-99	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
1	9989	19780	1.13	1.0E-100	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
2	9989	19780	1.93	1.0E-100	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
62	10048	19859	1.48	1.0E-100	11418230	NT	Homo sapiens Testis-specific XK-related protein on Y (XKRY), mRNA
62	10048	19860	1.48	1.0E-100	11418230	NT	Homo sapiens Testis-specific XK-related protein on Y (XKRY), mRNA
81	10065	19863	1.52	1.0E-100	AW275237.1	EST_HUMAN	xp78b11.x1 NCI CGAP_Bim53 Homo sapiens cDNA clone IMAGE:2824605 3'
162	10135	19950	1.16	1.0E-100	AL163206.2	NT	Homo sapiens chromosome 21 segment HS21C006
314	10276	20095	1.01	1.0E-100	AL163249.2	NT	Homo sapiens chromosome 21 segment HS21C049
340	10299	20114	2.43	1.0E-100	T05087.1	EST_HUMAN	EST02975 Fetal brain, Stratagene (cat#936206) Homo sapiens cDNA clone HFBOR32

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
430	10375		1.53	1.0E-100	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
481	10425		7.04	1.0E-100	X89631.1	NT	G.gorilla DNA for ZNF80 gene homolog
500	10442	20255	4.17	1.0E-100	BE180609.1	EST_HUMAN	RC3-HIT0625-040500-022-b09 HT0625 Homo sapiens cDNA
1002	10920	20763	2.43	1.0E-100	7661685	NT	Homo sapiens DKFZP586M0122 protein (DKFZP586M0122), mRNA
1002	10920	20764	2.43	1.0E-100	7661685	NT	Homo sapiens DKFZP586M0122 protein (DKFZP586M0122), mRNA
1528	11433		1.33	1.0E-100	AW207555.1	EST_HUMAN	UI-H-B11-afic-c-07-0-U1.s1 NCL_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2722164 3'
1533	11437	21294	1.46	1.0E-100	A1200857.1	EST_HUMAN	qf62f09.x1 Soares testis_NHT Homo sapiens cDNA clone IMAGE:1754633 3' similar to SW:CYT_COTJA
2195	12082		1.45	1.0E-100	D83349.1	NT	P81061 CYSTATIN ;
2388	12267	22160	1.08	1.0E-100	X62498.1	NT	Rat mRNA for short type PB-cadherin, complete cds
2674	12539	22429	1.87	1.0E-100	11418976	NT	H. sapiens mRNA for IFN-gamma (pKC-0)
2985	12913		2.45	1.0E-100	D11078.1	NT	Homo sapiens KIAA0957 protein (KIAA0957), mRNA
4116	14016	23796	1.49	1.0E-100	AF057354.1	NT	Homo sapiens RGH2 gene, retrovirus-like element
4143	14043	23816	1.87	1.0E-100	4503792	NT	Homo sapiens myotubularin-related protein 1a mRNA, partial cds
5024	14897	24665	3.07	1.0E-100	5032104	NT	Homo sapiens follicle stimulating hormone receptor (FSHR) mRNA
5024	14897	24666	3.07	1.0E-100	5032104	NT	Homo sapiens small optic lobes (Drosophila) homolog (SOLH) mRNA
5232	15155	24924	1.8	1.0E-100	BF244218.1	EST_HUMAN	Homo sapiens small optic lobes (Drosophila) homolog (SOLH) mRNA
5496	15415	25478	1.4	1.0E-100	AU118182.1	EST_HUMAN	601863164F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4080999 5'
5514	15432	25496	1.55	1.0E-100	AF135116.1	NT	AU118182 HEMBA1 Homo sapiens cDNA clone HEMBA1003046 5'
5915	15821	25946	5.1	1.0E-100	AU140214.1	EST_HUMAN	Homo sapiens NF-E2-related factor 3 gene, complete cds
6015	15919	26049	1.41	1.0E-100	R10887.1	EST_HUMAN	AU140214 PLACE2 Homo sapiens cDNA clone PLACE2000137 5'
6116	16010	26146	1.4	1.0E-100	BF376478.1	EST_HUMAN	y38c08.s1 Soares fetal liver spleen 1NFSL Homo sapiens cDNA clone IMAGE:129134 3'
6116	16010	26147	1.4	1.0E-100	BF376478.1	EST_HUMAN	MR1-TN0046-060900-004-b05 TN0046 Homo sapiens cDNA
6119	16013	26151	6.99	1.0E-100	X04571.1	NT	MR1-TN0046-060900-004-b05 TN0046 Homo sapiens cDNA
6963	16841	27033	6.19	1.0E-100	BF103853.1	EST_HUMAN	Human mRNA for kidney epidermal growth factor (EGF) precursor
6963	16860		5.44	1.0E-100	AL163203.2	NT	601647357F1 NIH_MGC_61 Homo sapiens cDNA clone IMAGE:3931310 5'
7322	17198	27398	3.2	1.0E-100	AB040918.1	NT	Homo sapiens chromosome 21 segment HS21C003
7369	17347		1.53	1.0E-100	A1972388.1	EST_HUMAN	Homo sapiens mRNA for KIAA1485 protein, partial cds
7426	16439	26625	1.67	1.0E-100	AW998611.1	EST_HUMAN	w37g09.x1 NCL_CGAP_Pr28 Homo sapiens cDNA clone IMAGE:2489920 3' similar to contains element
7527	17378	27587	1.73	1.0E-100	AB046846.1	NT	MER22 repetitive element ;
7527	17378	27588	1.73	1.0E-100	AB046846.1	NT	PMO-BN0065-100300-001-c06 BN0065 Homo sapiens cDNA
7664	17514	27740	1.89	1.0E-100	AW630487.1	EST_HUMAN	Homo sapiens mRNA for KIAA1626 protein, partial cds
							Homo sapiens mRNA for KIAA1626 protein, partial cds
							h83c11.y1 NCL_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2969396 5'

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7664	17514	27741	1.69	1.0E-100	AW630487.1	EST_HUMAN	h83c11.y1 NCI_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2969396 5'
8016	17866		1.29	1.0E-100	Y10391.1	NT	Human endogenous retrovirus HERV-K, pol gene
8141	18029	28275	5.23	1.0E-100	BF327292.1	EST_HUMAN	MR0-BN0070-270300-008-h11 BN0070 Homo sapiens cDNA
8806	18473	28745	2.14	1.0E-100	X94633.1	NT	H. sapiens CD97 gene exon 4
8806	18473	28746	2.14	1.0E-100	X94633.1	NT	H. sapiens CD97 gene exon 4
8660	18549	28831	4.56	1.0E-100	AF111170.3	NT	Homo sapiens 14q32 Jagged2 gene, complete cds; and unknown gene
8660	18549	28832	4.56	1.0E-100	AF111170.3	NT	Homo sapiens 14q32 Jagged2 gene, complete cds; and unknown gene
8688	9998	19780	1.96	1.0E-100	AL163247.2	NT	Homo sapiens chromosome 21 segment HS21C047
8830	18738		1.86	1.0E-100	AF266285.1	NT	Homo sapiens golgin-like protein (GLP) gene, complete cds
							Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
9048	18832	29114	5.59	1.0E-100	AF240786.1	NT	Homo sapiens SH3-domain binding protein 1 (SH3BP1), mRNA
9351	19027	25302	2.21	1.0E-100	11545732	NT	Homo sapiens transcobalamin II; macrocytic anemia (TCN2), mRNA
9940	19409	25181	3.38	1.0E-100	11417974	NT	Homo sapiens SEC14 (S. cerevisiae)-like 2 (SEC14L2), mRNA
70	10055	19871	1.22	1.0E-101	7110714	NT	Homo sapiens SEC14 (S. cerevisiae)-like 2 (SEC14L2), mRNA
70	10055	19872	1.22	1.0E-101	7110714	NT	Homo sapiens mRNA for KIAA0446 protein, partial cds
671	10605	20422	1.16	1.0E-101	AB007915.2	NT	Homo sapiens ventral anterior homeobox 2 (VAX2), mRNA
688	10621	20447	4.45	1.0E-101	7110734	NT	Homo sapiens ventral anterior homeobox 2 (VAX2), mRNA
688	10621	20448	4.45	1.0E-101	7110734	NT	Homo sapiens ventral anterior homeobox 2 (VAX2), mRNA
754	10684	20521	1.32	1.0E-101	7657454	NT	Homo sapiens pascadillo (zebrafish) homolog 1, containing BRCT domain (PES1), mRNA
							Homo sapiens phosphoribosylglycinamide formyltransferase, phosphoribosylglycinamide synthetase, phosphoribosylaminimidazole synthetase (GART) mRNA
835	10762	20612	1.28	1.0E-101	4503914	NT	Homo sapiens of cardiac alpha-myosin heavy chain gene
908	10832	20679	3.44	1.0E-101	Z20656.1	NT	Homo sapiens of cardiac alpha-myosin heavy chain gene
969	10892	20741	12.74	1.0E-101	BF681218.1	EST_HUMAN	602156474F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4297291 5'
1036	10954	20796	1.63	1.0E-101	A1221878.1	EST_HUMAN	q99e09.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1843336 3'
1712	11613	21483	0.87	1.0E-101	7662183	NT	Homo sapiens KIAA0569 gene product (KIAA0569), mRNA
1712	11613	21484	0.87	1.0E-101	7662183	NT	Homo sapiens KIAA0569 gene product (KIAA0569), mRNA
1901	11797	21677	1.62	1.0E-101	4502996	NT	Homo sapiens carboxypeptidase A1 (pancreatic) (CPA1) mRNA
2010	11902	21792	1.6	1.0E-101	BE843070.1	EST_HUMAN	RC3-ST0281-160800-C16-h09 ST0281 Homo sapiens cDNA
2301	12718	22080	1.66	1.0E-101	5729892	NT	Homo sapiens A kinase (PRKA) anchor protein 6 (AKAP6), mRNA
2572	12443	22335	4.4	1.0E-101	X72993.1	NT	H. sapiens EWS gene, exon 5
2714	12576	22468	2.56	1.0E-101	AJ237744.1	NT	Homo sapiens RIBIR gene (partial), exon 12
2714	12576	22469	2.56	1.0E-101	AJ237744.1	NT	Homo sapiens RIBIR gene (partial), exon 12
2925	12852		12.14	1.0E-101	AJ252312.1	NT	Homo sapiens genomic downstream Rhesus box
3167	13092	22897	2.51	1.0E-101	4886270	NT	Homo sapiens gamma-glutamyltransferase 1 (GGT1) mRNA

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Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3203	13127		2.16	1.0E-101	BF05327.1	EST_HUMAN	601458531F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3862086 5'
3334	13254	23059	1.67	1.0E-101	AW965556.1	EST_HUMAN	EST377629 MAGE resequences, MAGI Homo sapiens cDNA
3354	12576	22468	1.75	1.0E-101	AJ237744.1	NT	Homo sapiens RIBIIR gene (partial), exon 12
3354	12576	22469	1.75	1.0E-101	AJ237744.1	NT	Homo sapiens RIBIIR gene (partial), exon 12
3800	13712	23499	4.83	1.0E-101	AB022785.1	NT	Homo sapiens ASH2L gene, complete cds, similar to Drosophila ash2 gene
4965	14840	24609	1.67	1.0E-101	5921460	NT	Homo sapiens butyrophilin, subfamily 2, member A1 (BTN2A1), mRNA
4965	14840	24610	1.67	1.0E-101	5921460	NT	Homo sapiens butyrophilin, subfamily 2, member A1 (BTN2A1), mRNA
5257	15179	24954	1.4	1.0E-101	AW965139.1	EST_HUMAN	EST377212 MAGE resequences, MAGI Homo sapiens cDNA
5651	15563	25658	3.73	1.0E-101	7427512	NT	Homo sapiens cytoplasmic linker 2 (CYLN2), mRNA
5651	15563	25659	3.73	1.0E-101	7427512	NT	Homo sapiens cytoplasmic linker 2 (CYLN2), mRNA
5333	16196	26356	4.16	1.0E-101	AF208970.1	NT	Homo sapiens Kruppel-type zinc finger protein (PEG3) mRNA, alternative splice form 4, partial cds
5333	16196	26357	4.16	1.0E-101	AF208970.1	NT	Homo sapiens Kruppel-type zinc finger protein (PEG3) mRNA, alternative splice form 4, partial cds
6416	16278	26441	5.63	1.0E-101	AW008475.1	EST_HUMAN	w55f12.x1 NCL CGAP_Ga4 Homo sapiens cDNA clone IMAGE:2533487 3'
6471	16330		1.56	1.0E-101	BE257384.1	EST_HUMAN	601109217F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3349901 5'
6544	16402	26581	5.3	1.0E-101	BF330759.1	EST_HUMAN	RC1-BT0313-220700-018-F12 BT0313 Homo sapiens cDNA
6693	16573	26764	2.65	1.0E-101	BF029174.1	EST_HUMAN	60176466F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3990637 5'
7208	17085	27274	1.15	1.0E-101	AA036800.1	EST_HUMAN	zK29q08.r1 Soares_pregnant uterus_NbHPU Homo sapiens cDNA clone IMAGE:471998 5' similar to
7446	16458	26650	16.52	1.0E-101	X60069.1	NT	Human mRNA for pancreatic gamma-glutamyltransferase
7446	16458	26651	16.52	1.0E-101	X60069.1	NT	Human mRNA for pancreatic gamma-glutamyltransferase
7454	17263	27468	18.4	1.0E-101	9845492	NT	Homo sapiens gamma-glutamyltransferase 1 (GGT1), transcript variant 3, mRNA
7623	17474	27694	5.64	1.0E-101	BE619667.1	EST_HUMAN	601472808T1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3875953 3'
7623	17474	27695	5.64	1.0E-101	BE619667.1	EST_HUMAN	601472808T1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3875953 3'
7950	17800	28040	1.76	1.0E-101	11429127	NT	Homo sapiens Janus kinase 2 (a protein tyrosine kinase) (JAK2), mRNA
8252	18132	28381	2.88	1.0E-101	S38327.1	NT	branched-chain alpha-keto acid dehydrogenase complex E1 alpha subunit [human, Genomic, 195 nt, segment 8 of 9]
8454	18327	28586	1.78	1.0E-101	AB020626.1	NT	Homo sapiens mRNA for KIAA0819 protein, partial cds
9610	19189		11.62	1.0E-101	AW939051.1	EST_HUMAN	QV1-DT0069-240200-085-a01 DT0068 Homo sapiens cDNA
338	10297	20111	3.24	1.0E-102	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
604	10540	20350	0.89	1.0E-102	BE252470.1	EST_HUMAN	601108292F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3344326 5'
758	10688	20526	1.46	1.0E-102	4557534	NT	Homo sapiens down-regulated in adenoma (DRA) mRNA
1101	11017	20859	1.95	1.0E-102	M10976.1	NT	Human endogenous retroviral DNA (4-1), complete retroviral segment
1247	11154	21002	1.39	1.0E-102	11437146	NT	Homo sapiens solute carrier family 2 (facilitated glucose transporter), member 9 (SLC2A9), mRNA
1247	11154	21003	1.39	1.0E-102	11437146	NT	Homo sapiens solute carrier family 2 (facilitated glucose transporter), member 9 (SLC2A9), mRNA

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1398	11303	21162	90.24	1.0E-102	BE408447.1	EST_HUMAN	601299982F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3629901 5'
2261	12145	22044	1.34	1.0E-102	AI124669.1	EST_HUMAN	em60c10.x1 Johnson frontal cortex Homo sapiens cDNA clone IMAGE:1539954 3' similar to SW:GG95_HUMAN Q08379 GOLGIN-95.;
2261	12145	22045	1.34	1.0E-102	AI124669.1	EST_HUMAN	am60c10.x1 Johnson frontal cortex Homo sapiens cDNA clone IMAGE:1539954 3' similar to SW:GG95_HUMAN Q08379 GOLGIN-95.;
3026	12954	22747	1.51	1.0E-102	7661979	NT	Homo sapiens KIAA0187 gene product (KIAA0187), mRNA
3094	13021	22815	5.61	1.0E-102	AU141005.1	EST_HUMAN	AU141005 PLACE4 Homo sapiens cDNA clone PLACE4000650 5'
3094	13021	22816	5.61	1.0E-102	AU141005.1	EST_HUMAN	AU141005 PLACE4 Homo sapiens cDNA clone PLACE4000650 5'
4139	14039	23814	1.46	1.0E-102	AL163207.2	NT	Homo sapiens chromosome 21 segment HS21C007
4314	14211	23994	2.11	1.0E-102	BE251310.1	EST_HUMAN	601107843F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3343382 5'
5063	14933	24705	1.09	1.0E-102	R69488.1	EST_HUMAN	y32c04.r1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:140934 5'
5300	15221	25025	1.88	1.0E-102	AF067133.1	NT	Homo sapiens protein phosphatase-1 regulatory subunit 7 (PPP1R7) gene, exon 7
5515	15433		7.27	1.0E-102	AB034951.1	NT	Homo sapiens HSC54 mRNA for heat shock cognate protein 54, complete cds
5536	15453	25522	3.46	1.0E-102	7705398	NT	Homo sapiens histone deacetylase 7 (HDAC7), mRNA
5536	15453	25523	3.46	1.0E-102	7705398	NT	Homo sapiens histone deacetylase 7 (HDAC7), mRNA
5800	15706	25818	2.54	1.0E-102	AI459825.1	EST_HUMAN	ar82f09.x1 Barstead colon HPLRB7 Homo sapiens cDNA clone IMAGE:2151785 3' similar to TR:Q13137 Q13137 NDP62.;
6351	16214	26376	6.56	1.0E-102	AJ238994.1	NT	Homo sapiens mRNA for Centaurin-alpha2 protein
6495	16354	26524	2.53	1.0E-102	AV710738.1	EST_HUMAN	AV710738 Cu Homo sapiens cDNA clone GuAAKD03 5'
6787	16666	26857	4.2	1.0E-102	BE763051.1	EST_HUMAN	QV3-NT0025-210600-236-h08 NT0025 Homo sapiens cDNA
6832	16711	26904	2.53	1.0E-102	BE910555.1	EST_HUMAN	601501107F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3903145 5'
6945	16823	27014	1.36	1.0E-102	AV694817.1	EST_HUMAN	AV694817 GKC Homo sapiens cDNA clone GKCEE11 5'
6945	16823	27015	1.36	1.0E-102	AV694817.1	EST_HUMAN	AV694817 GKC Homo sapiens cDNA clone GKCEE11 5'
7001	16878	27069	4.06	1.0E-102	AB007923.1	NT	Homo sapiens mRNA for KIAA0454 protein, partial cds
7374	17243	27448	1.52	1.0E-102	T70393.1	EST_HUMAN	ydf13d07.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:67021 5'
7374	17243	27449	1.52	1.0E-102	T70393.1	EST_HUMAN	ydf13d07.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:67021 5'
7415	17282	27490	3.58	1.0E-102	AU124629.1	EST_HUMAN	AU124629 NT2RM4 Homo sapiens cDNA clone NT2RM4000309 5'
7961	17811	28052	2.03	1.0E-102	11425430	NT	Homo sapiens myomesin (M-protein) 2 (165kD) (MYOM2), mRNA
7961	17811	28053	2.03	1.0E-102	11425430	NT	Homo sapiens myomesin (M-protein) 2 (165kD) (MYOM2), mRNA
7981	17831	28070	2.9	1.0E-102	AI905037.1	EST_HUMAN	RC-BT074-250499-014 BT074 Homo sapiens cDNA
7981	17831	28071	2.9	1.0E-102	AI905037.1	EST_HUMAN	RC-BT074-250499-014 BT074 Homo sapiens cDNA
8005	17855	28086	2.3	1.0E-102	AA970786.1	EST_HUMAN	on57h04.s1 Soares NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1560823 3' similar to SW:CAV2_HUMAN P51638 CAVEOLIN-2. [1];
8421	18295	28549	2.38	1.0E-102	BE897468.1	EST_HUMAN	601439392F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3924166 5'

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Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8424	18298	28553	1.99	1.0E-102	4507822	NT	Homo sapiens UDP glycosyltransferase 2 family, polypeptide B11 (UGT2B11) mRNA
8424	18298	28554	1.99	1.0E-102	4507822	NT	Homo sapiens UDP glycosyltransferase 2 family, polypeptide B11 (UGT2B11) mRNA
8708	18525	28807	2.78	1.0E-102	BF389243.1	EST_HUMAN	RC6-ET0072-150600-011-F01 ET0072 Homo sapiens cDNA
8947	18755	29051	4.04	1.0E-102	U41302.1	NT	Human chromosome 16 creatine transporter (SLC6A8) and (CDM) paralogous genes, complete cds
9054	18837		2.82	1.0E-102	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
9601	19183	25247	4.77	1.0E-102	AW300862.1	EST_HUMAN	xl07c12.x1 NCL CGAP_Co20 Homo sapiens cDNA clone IMAGE:2666038 3'
63	10049	19861	0.82	1.0E-103	BE908158.1	EST_HUMAN	601500405F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3902305 5'
63	10049	19862	0.82	1.0E-103	BE908158.1	EST_HUMAN	601500405F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3902305 5'
93	10078	19894	8.1	1.0E-103	D87078.2	NT	Homo sapiens mRNA for KIAA0235 protein, partial cds
201	10173	19989	0.83	1.0E-103	5453793	NT	Homo sapiens nuclear protein (KKE/D repeat) (NOP56) mRNA
965	10888	20734	1.01	1.0E-103	AJ278348.1	NT	Homo sapiens mRNA for pregnancy-associated plasma protein-E (PAPPE gene)
1223	11131	20985	7.29	1.0E-103	BE877541.1	EST_HUMAN	601485388F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3887876 5'
1578	11482	21342	2.32	1.0E-103	AF012872.1	NT	Homo sapiens phosphatidylinositol 4-kinase 230 (pi4K230) mRNA, complete cds
1872	11768	21643	1.04	1.0E-103	7657592	NT	Homo sapiens sing GDS-ASSOCIATED PROTEIN (SMAP), mRNA
1932	11827	21708	1.27	1.0E-103	4502428	NT	Homo sapiens bone morphogenetic protein 8 (osteogenic protein 2) (BMP8) mRNA
1932	11827	21709	1.27	1.0E-103	4502428	NT	Homo sapiens bone morphogenetic protein 8 (osteogenic protein 2) (BMP8) mRNA
2257	12141	22040	1.57	1.0E-103	AU134991.1	EST_HUMAN	AU134991 PLACE1 Homo sapiens cDNA clone PLACE1000965 5'
2401	12278	22175	2.22	1.0E-103	AF060568.1	NT	Homo sapiens promyelocytic leukemia zinc finger protein (PLZF) gene, complete cds
2578	12449	22340	0.86	1.0E-103	N32770.1	EST_HUMAN	yw91d08.s1 Soares_placenta_8609weeks_2NbHP8c9W Homo sapiens cDNA clone IMAGE:259599 3'
3030	12958		2.43	1.0E-103	BE744722.1	EST_HUMAN	601573113F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3834315 5'
3333	13253	23058	3.44	1.0E-103	AW298245.1	EST_HUMAN	UI-H-BW0-ajl-h-11-o-UI.s1 NCL CGAP_Sub6 Homo sapiens cDNA clone IMAGE:2733165 3'
3393	13310	23108	1.06	1.0E-103	AB040892.1	NT	Homo sapiens mRNA for KIAA1459 protein, partial cds
3695	13609		2.41	1.0E-103	AF023861.1	NT	Macaca mulatta cyclophilin A mRNA, complete cds
3725	13637	23423	1.16	1.0E-103	AA485663.1	EST_HUMAN	ab10d12.s1 Stratagene lung (#937210) Homo sapiens cDNA clone IMAGE:840407 3' similar to contains element LTR10 repetitive element ;
3757	13670	23454	1.39	1.0E-103	11430876	NT	Homo sapiens neuropilin 1 (NRP1), mRNA
3922	13831	23611	3.02	1.0E-103	T23683.1	EST_HUMAN	seq340 b4HB3MA-Cot109+10-Bio Homo sapiens cDNA clone b4HB3MA-Cot109+10-Bio-7 3'
5619	15534	25619	1.72	1.0E-103	AF179895.1	NT	Homo sapiens septin 2 (SEP2) mRNA, partial cds
5998	15903	26027	5.37	1.0E-103	AF053490.1	NT	Homo sapiens glycine receptor alpha 2 subunit (GLRA2) gene, exon 4
6033	15936	26069	1.68	1.0E-103	AI590071.1	EST_HUMAN	tm58b05.x1 NCL CGAP_Brn25 Homo sapiens cDNA clone IMAGE:2162289 3' similar to TR:Q13769 Q13769 ANONYMOUS. ;

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6033	15936	26070	1.68	1.0E-103	AI590071.1	EST_HUMAN	tm58b05.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2162289 3' similar to TR:Q13769 Q13769 ANONYMOUS.;
6092	15102	24878	1.68	1.0E-103	5032282	NT	Homo sapiens dystrophin (muscular dystrophy, Duchenne and Becker types), includes DXS142, DXS164, DXS206, DXS230, DXS239, DXS268, DXS269, DXS270, DXS272 (DMD), transcript variant Dp427m, mRNA
6092	15102	24879	1.68	1.0E-103	5032282	NT	Homo sapiens dystrophin (muscular dystrophy, Duchenne and Becker types), includes DXS142, DXS164, DXS206, DXS230, DXS239, DXS268, DXS269, DXS270, DXS272 (DMD), transcript variant Dp427m, mRNA
6289	16153	26310	1.64	1.0E-103	AW1965776.1	EST_HUMAN	EST377849 IMAGE resequences, MAGI Homo sapiens cDNA
6338	16201	26361	3.21	1.0E-103	BE748158.1	EST_HUMAN	601571537F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:3838545 5'
6568	16426	26607	3.28	1.0E-103	AI590071.1	EST_HUMAN	tm58b05.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2162289 3' similar to TR:Q13769 Q13769 ANONYMOUS.;
6568	16426	26608	3.28	1.0E-103	AI590071.1	EST_HUMAN	tm58b05.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2162289 3' similar to TR:Q13769 Q13769 ANONYMOUS.;
6823	16702	26896	2.95	1.0E-103	T31080.1	EST_HUMAN	EST27193 Human Brain Homo sapiens cDNA 5' end similar to None
7010	16887	27079	1.17	1.0E-103	AU140344.1	EST_HUMAN	AU140344 PLACE2 Homo sapiens cDNA clone PLACE2000374 5'
7010	16887	27080	1.17	1.0E-103	AU140344.1	EST_HUMAN	AU140344 PLACE2 Homo sapiens cDNA clone PLACE2000374 5'
7060	16927	27118	1.43	1.0E-103	BF109244.1	EST_HUMAN	7160a03.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3525964 3' similar to SW:PTNF_HUMAN Q16825 PROTEIN-TYROSINE PHOSPHATASE D1;
7267	17144	27337	3.08	1.0E-103	6005921	NT	Homo sapiens triple functional domain (PTPRF interacting) (TRIO), mRNA
7267	17144	27338	3.08	1.0E-103	6005921	NT	Homo sapiens triple functional domain (PTPRF interacting) (TRIO), mRNA
7787	17637	27870	2.02	1.0E-103	Z37976.1	NT	H.sapiens mRNA for latent transforming growth factor-beta binding protein (LTBP-2)
7815	17665	27905	2.09	1.0E-103	AW963676.1	EST_HUMAN	EST375749 IMAGE resequences, MAGH Homo sapiens cDNA
7878	17728	27972	9.93	1.0E-103	AI879956.1	EST_HUMAN	au51g04.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2518326 5' similar to TR:O15046 O15046 KIAA0338;
8115	18004	28250	3.08	1.0E-103	AI792759.1	EST_HUMAN	cl02006.y5 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1522283 5' similar to TR:Q62084 Q62084 PHOSPHOLIPASE C NEIGHBORING;
8218	18101	28353	2.74	1.0E-103	AF149773.1	NT	Homo sapiens NOD1 protein (NOD1) gene, exons 1, 2, and 3
8218	18101	28354	2.74	1.0E-103	AF149773.1	NT	Homo sapiens NOD1 protein (NOD1) gene, exons 1, 2, and 3
8681	18569	28552	2.56	1.0E-103	AU136283.1	EST_HUMAN	AU136283 PLACE1 Homo sapiens cDNA clone PLACE1003923 5'
8743	17892	28136	6.49	1.0E-103	L43610.1	NT	Homo sapiens polycystic kidney disease (PKD1) gene, exons 27-30
8973	18778	29070	3.42	1.0E-103	BE644611.1	EST_HUMAN	7e68a10.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3287610 3' similar to contains MER29.i3 MER29 repetitive element;

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9049	18833		1.72	1.0E-103	AF224669.1	NT	Homo sapiens mannosidase, beta A, lysosomal (MANBA) gene, and ubiquitin-conjugating enzyme E2D 3 (UBE2D3) genes, complete cds
9079	18855		2.65	1.0E-103	11526291	NT	Homo sapiens hypothetical protein FLJ20454 (FLJ20454), mRNA
9275	18979	25323	2.21	1.0E-103	AB011399.1	NT	Homo sapiens gene for AF-6, complete cds
233	10202	20016	2.6	1.0E-104	AL037549.3	EST_HUMAN	DKFZp564H1072.1 564 (synonym: hfr2) Homo sapiens cDNA clone DKFZp564H1072 5'
233	10202	20017	2.6	1.0E-104	AL037549.3	EST_HUMAN	DKFZp564H1072.1 564 (synonym: hfr2) Homo sapiens cDNA clone DKFZp564H1072 5' (BMP8) mRNA
1845	11741	21617	1.81	1.0E-104	4502428	NT	Homo sapiens bone morphogenetic protein 8 (osteogenic protein 2) (BMP8) mRNA
2147	12035	21932	7.16	1.0E-104	AA132975.1	EST_HUMAN	z02206 st Stratagene clone (#937204) Homo sapiens cDNA clone IMAGE:587626 3' similar to gb:Z14116_rna1 CD59 GLYCOPROTEIN PRECURSOR (HUMAN);
2157	12044	21944	1.91	1.0E-104	BE744628.1	EST_HUMAN	601577460F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3926438 5'
2318	12199	22097	1.15	1.0E-104	BF334221.1	EST_HUMAN	RC1-CT0249-110900-2' 4'-f12 CT0249 Homo sapiens cDNA
2318	12199	22098	1.15	1.0E-104	BF334221.1	EST_HUMAN	RC1-CT0249-110900-2' 4'-f12 CT0249 Homo sapiens cDNA
2387	12266	22159	1.55	1.0E-104	5031570	NT	Homo sapiens ARP2 (actin-related protein 2, yeast) homolog (ACTR2), mRNA
2842	12770	22559	7.64	1.0E-104	M34671.1	NT	Human lymphocytic antigen CD59/MEIM43 mRNA, complete cds
2886	12813		2.82	1.0E-104	Y11151.1	NT	H.sapiens gene encoding phenylpyruvate tautomerase II
3345	13265		1.54	1.0E-104	AA319436.1	EST_HUMAN	EST21658 Adrenal gland tumor Homo sapiens cDNA 5' end
3550	13465	23260	0.99	1.0E-104	AB033102.1	NT	Homo sapiens mRNA for KIAA1276 protein, partial cds
3550	13465	23261	0.99	1.0E-104	AB033102.1	NT	Homo sapiens mRNA for KIAA1276 protein, partial cds
3861	13772	23564	0.91	1.0E-104	AB032998.1	NT	Homo sapiens mRNA for KIAA1172 protein, partial cds
4280	14179	23957	4.28	1.0E-104	X02761.1	NT	Human mRNA for fibronectin (FN precursor)
4504	14397	24182	0.9	1.0E-104	AF231920.1	NT	Homo sapiens chromosome 21 unknown mRNA
4504	14397	24183	0.9	1.0E-104	AF231920.1	NT	Homo sapiens chromosome 21 unknown mRNA
5617	15532	25615	1.33	1.0E-104	U43379.1	NT	Human Down Syndrome region of chromosome 21 DNA
5617	15532	25616	1.33	1.0E-104	U43379.1	NT	Human Down Syndrome region of chromosome 21 DNA
5891	15797	25919	8.46	1.0E-104	AI768797.1	EST_HUMAN	wj03b12.x1 NCI CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2401727 3' similar to TR:Q14145 Q14145 KIAA0132 PROTEIN, contains element LTR7 repetitive element;
5891	15797	25920	8.46	1.0E-104	AI768797.1	EST_HUMAN	wj03b12.x1 NCI CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2401727 3' similar to TR:Q14145 Q14145 KIAA0132 PROTEIN, contains element LTR7 repetitive element;
6073	16056	26204	1.52	1.0E-104	BE314182.1	EST_HUMAN	601150451F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3503220 5'
6073	16056	26205	1.52	1.0E-104	BE314182.1	EST_HUMAN	601150451F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3503220 5'
6288	16152	26309	2.38	1.0E-104	11425572	NT	Homo sapiens adaptor-related protein complex 2, beta 1 subunit (AP2B1), mRNA
7288	17184	27363	2.24	1.0E-104	BF448230.1	EST_HUMAN	ncd16g11.x1 NCI CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3365948 3'
7370	17239	27442	4.66	1.0E-104	AF091395.1	NT	Homo sapiens Trio isoform mRNA, complete cds
7370	17239	27443	4.66	1.0E-104	AF091395.1	NT	Homo sapiens Trio isoform mRNA, complete cds

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Table 4
Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7430	16443	26630	3.84	1.0E-104	BF352841.1	EST_HUMAN	IL3-HT0619-080900-249-F07 HT0619 Homo sapiens cDNA
7430	10443	26631	3.84	1.0E-104	BF352841.1	EST_HUMAN	IL3-HT0619-080900-249-F07 HT0619 Homo sapiens cDNA
7809	17659	27898	3.14	1.0E-104	BE791713.1	EST_HUMAN	601581503F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3935977 5'
7809	17659	27899	3.14	1.0E-104	BE791713.1	EST_HUMAN	601581503F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3935977 5'
7947	17197	28037	1.42	1.0E-104	AV728070.1	EST_HUMAN	AV728070 HTC Homo sapiens cDNA clone HTOBYA07 5'
7966	17816	28057	4.51	1.0E-104	AU130785.1	EST_HUMAN	AU130785 NT2RP3 Homo sapiens cDNA clone NT2RP3001398 5'
8014	17864	28110	4.24	1.0E-104	U66535.1	NT	Human beta4-integrin (ITGB4) gene, exons 19,20,21,22,23,24 and 25
8617	18484	28755	1.84	1.0E-104	BE720191.1	EST_HUMAN	RC0-HT0885-310700-021-b09 HT0885 Homo sapiens cDNA
8617	18484	28756	1.84	1.0E-104	BE720191.1	EST_HUMAN	RC0-HT0885-310700-021-b09 HT0885 Homo sapiens cDNA
8641	18505	28783	4.49	1.0E-104	BF684288.1	EST_HUMAN	602141215F1 NIH_MGC_46 Homo sapiens cDNA clone IMAGE:4302507 5'
9842	19340		1.37	1.0E-104	BE393692.1	EST_HUMAN	601312181F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3658676 5'
277	12637	20062	2.86	1.0E-105	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
419	9986	19777	16.85	1.0E-105	4505150	NT	Homo sapiens Meis1 (mouse) homolog (MEIS1) mRNA
579	10517	20323	3.22	1.0E-105	AF032897.1	NT	Homo sapiens potassium channel subunit (HERG-3) mRNA, complete cds
579	10517	20324	3.22	1.0E-105	AF032897.1	NT	Homo sapiens potassium channel subunit (HERG-3) mRNA, complete cds
1777	11676	21553	1.16	1.0E-105	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
1884	11780	21655	1.75	1.0E-105	D50918.1	NT	Human mRNA for KIAA0128 gene, partial cds
2142	12030	21928	1.64	1.0E-105	AA318369.1	EST_HUMAN	EST20609 Spleen I Homo sapiens cDNA 5' end similar to autocrine antigen Ku, p70/p80 subunit
2689	12554		0.87	1.0E-105	AA594808.1	EST_HUMAN	nt010d05.s1 NCL CGAP_Phet Homo sapiens cDNA clone IMAGE:1100265 3'
2975	12902		2.57	1.0E-105	AJ229041.1	NT	Homo sapiens 959 kb contig between AML1 and CBR1 on chromosome 21q22; segment 1/3
3307	13228	23032	0.93	1.0E-105	7304922	NT	Homo sapiens bromodomain adjacent to zinc finger domain, 2B (BAZ2B), mRNA
3307	13228	23033	0.93	1.0E-105	7304922	NT	Homo sapiens bromodomain adjacent to zinc finger domain, 2B (BAZ2B), mRNA
3582	13506		1.26	1.0E-105	11425532	NT	Homo sapiens dermatopontin (DPT), mRNA
4008	13914	23689	2.15	1.0E-105	AW961688.1	EST_HUMAN	EST373761 IMAGE resequences, MAGG Homo sapiens cDNA
4638	14626	24313	0.84	1.0E-105	BE868891.1	EST_HUMAN	601445823F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3850156 5'
4638	14526	24314	0.84	1.0E-105	BE868891.1	EST_HUMAN	601445823F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3850156 5'
4855	14735		3.74	1.0E-105	AL163208.2	NT	Homo sapiens chromosome 21 segment HS21C008
5044	14916	24890	0.95	1.0E-105	AB018339.1	NT	Homo sapiens mRNA for KIAA0796 protein, partial cds
5095	14965	24740	2.23	1.0E-105	AB020673.1	NT	Homo sapiens mRNA for KIAA0866 protein, complete cds
5161	14916	24690	1.3	1.0E-105	AB018339.1	NT	Homo sapiens mRNA for KIAA0796 protein, partial cds
6167	15124	24840	3.06	1.0E-105	11419193	NT	Homo sapiens GTPase activating protein-like (GAPL), mRNA
6167	15124	24841	3.06	1.0E-105	11419193	NT	Homo sapiens GTPase activating protein-like (GAPL), mRNA
6679	16559	26754	6.43	1.0E-105	T05087.1	EST_HUMAN	EST02975 Fetal brain, Striatum (cat#936206) Homo sapiens cDNA clone HFBCR32

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6894	16773	26967	1.8	1.0E-105	AW007194.1	EST_HUMAN	ws50c10.x1 NCI_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2500628 3' similar to SW:ACSA_PENCH P93333 ACETYL-COENZYME A SYNTHETASE ;
7234	17111	27304	2.99	1.0E-105	AW016879.1	EST_HUMAN	U1H-B10p-ab1-b-12-0-U1.s1 NCI_CGAP_Sub2 Homo sapiens cDNA clone IMAGE:2711782 3'
8303	18181	28428	5.44	1.0E-105	AF254822.1	NT	Homo sapiens SMARCA4 isoform (SMARCA4) gene, complete cds, alternatively spliced
8560	18430	28699	1.8	1.0E-105	D63548.1	NT	Homo sapiens COL4A6 gene for a6(IV) collagen, exon 31
8602	18469	28740	2.06	1.0E-105	7705936	NT	Homo sapiens Ran binding protein 11 (LOC51194), mRNA
8867	18679	28968	2.01	1.0E-105	AW027554.1	EST_HUMAN	w74f07.x1 Soares_thymus_NHFT Homo sapiens cDNA clone IMAGE:2535301 3' similar to TR:P87892 P87892 PROTEASE ;
145	10119		0.96	1.0E-106	AW503208.1	EST_HUMAN	U1HF-BNO-akt-g-07-0-U1.1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3078348 5'
198	10170	19987	1.54	1.0E-106	AI565065.1	EST_HUMAN	tg79c01.x1 NCI_CGAP_U11 Homo sapiens cDNA clone IMAGE:2215008 3'
531	10473	20286	1.77	1.0E-106	AW965556.1	EST_HUMAN	EST377629 MAGI resequences, MAGI Homo sapiens cDNA
589	10527	20334	0.79	1.0E-106	J00146.1	NT	Human dihydrofolate reductase pseudogene (psi-hd1)
590	10527	20334	1.21	1.0E-106	J00146.1	NT	Human dihydrofolate reductase pseudogene (psi-hd1)
1508	11413	21272	2.66	1.0E-106	AF145712.1	NT	Homo sapiens soluble neuropilin-1 mRNA, complete cds
1674	11576	21444	4.51	1.0E-106	U48724.1	NT	Human epidermal growth factor receptor (EGFR) precursor-mRNA, exon 4, partial cds
1762	11661	21533	5.12	1.0E-106	AA527446.1	EST_HUMAN	ng41c05.s1 NCI_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element LTR3 repetitive element ;
1762	11661	21534	5.12	1.0E-106	AA527446.1	EST_HUMAN	ng41c05.s1 NCI_CGAP_Co3 Homo sapiens cDNA clone IMAGE:937352 3' similar to contains element LTR3 repetitive element ;
2075	11965	21858	1.08	1.0E-106	BE144286.1	EST_HUMAN	MR0-HT0165-140200-008-d10 HT0165 Homo sapiens cDNA
2269	12153	22052	8.39	1.0E-106	4504184	NT	Homo sapiens glutathione S-transferase theta 1 (GSTT1), mRNA
2456	12333	22229	1.63	1.0E-106	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
2557	12429	23322	1.25	1.0E-106	U64675.2	NT	Homo sapiens sperm membrane protein BS-63 mRNA, complete cds
2559	12431	23324	1.94	1.0E-106	BE260201.1	EST_HUMAN	601149783F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3502461 5'
2729	12591	22487	4.23	1.0E-106	AI276526.1	EST_HUMAN	q176h10.x1 Soares_NhMMPu_S1 Homo sapiens cDNA clone IMAGE:1878307 3'
2795	11319	21183	2.97	1.0E-106	4504184	NT	Homo sapiens glutathione S-transferase theta 1 (GSTT1), mRNA
2795	11319	21184	2.97	1.0E-106	4504184	NT	Homo sapiens glutathione S-transferase theta 1 (GSTT1), mRNA
2911	12837	22635	5.01	1.0E-106	AB037747.1	NT	Homo sapiens mRNA for KIAA1326 protein, partial cds
2911	12837	22636	5.01	1.0E-106	AB037747.1	NT	Homo sapiens mRNA for KIAA1326 protein, partial cds
3143	13068	22867	2.36	1.0E-106	8922955	NT	Homo sapiens hypothetical protein FLJ11273 (FLJ11273), mRNA
3143	13068	22868	2.36	1.0E-106	8922955	NT	Homo sapiens hypothetical protein FLJ11273 (FLJ11273), mRNA
3328	13248	23053	0.8	1.0E-106	AB008981.1	NT	Homo sapiens gene for activin receptor type IIB, complete cds
3394	13311	23109	0.98	1.0E-106	AB033104.1	NT	Homo sapiens mRNA for KIAA1278 protein, partial cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3394	13311	23110	0.98	1.0E-106	AB033104.1	NT	Homo sapiens mRNA for KIAA1278 protein, partial cds
3952	13860	23634	7.22	1.0E-106	AW974850.1	EST_HUMAN	EST386875 IMAGE resequences, MAGN Homo sapiens cDNA
3952	13860	23635	7.22	1.0E-106	AW974850.1	EST_HUMAN	EST386875 IMAGE resequences, MAGN Homo sapiens cDNA
4497	14391	24176	1.21	1.0E-106	BE144286.1	EST_HUMAN	MR0-HT0165-140200-008-d10 HT0165 Homo sapiens cDNA
5183	15047		1.21	1.0E-106	L41644.1	NT	Homo sapiens dystrophin gene, exon 41
5298	15219	25022	2.98	1.0E-106	AA781155.1	EST_HUMAN	aj24b09.s1 Soares_testis_NHT Homo sapiens cDNA clone 1391225 3' similar to gb:X12433 PROTEIN
5711	15619	25722	6.78	1.0E-106	BF678574.1	EST_HUMAN	PHPS1-2 (HUMAN);
5866	15772	25891	16.4	1.0E-106	11545913	EST_HUMAN	602154012F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4285087 5'
5866	15772	25892	16.4	1.0E-106	11545913	NT	Homo sapiens xylosyltransferase II (XT2), mRNA
6361	16224	26385	5.59	1.0E-106	AA663779.1	EST_HUMAN	ae72e07.s1 Stratagene schizo brain S11 Homo sapiens cDNA clone IMAGE:969732 3' similar to gb:X65873
6390	16252	26412	4.83	1.0E-106	11429617	NT	KINESIN HEAVY CHAIN (HUMAN);
6431	16292	26453	1.35	1.0E-106	BE292722.1	EST_HUMAN	Homo sapiens XPMC2 protein (LOC57109), mRNA
6490	16348	26517	7.6	1.0E-106	11425503	NT	601105730F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2988345 5'
6490	16348	26518	7.6	1.0E-106	11425503	NT	Homo sapiens sorting nexin 11 (SNX11), mRNA
6657	16537	26733	5.33	1.0E-106	BE741408.1	EST_HUMAN	Homo sapiens sorting nexin 11 (SNX11), mRNA
6657	16537	26734	5.33	1.0E-106	BE741408.1	EST_HUMAN	601594331F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948463 5'
6754	16633	26821	1.48	1.0E-106	AI523066.1	EST_HUMAN	601594331F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3948463 5'
7052	16929	27120	3.16	1.0E-106	AI654123.1	EST_HUMAN	ar68a07.x1 Barstead aorta HPLRB6 Homo sapiens cDNA clone IMAGE:2127732 3' similar to gb:X06233
7281	17158	27353	1.86	1.0E-106	AA825307.1	EST_HUMAN	CALGRANULIN B (HUMAN);
7281	17158	27354	1.86	1.0E-106	AA825307.1	EST_HUMAN	ty62a05.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2283632 3' similar to SW:ICA6_HUMAN
7351	17219	27419	2.79	1.0E-106	AI750447.1	EST_HUMAN	Q05084 69 KD ISLET CELL AUTOANTIGEN ;
7424	17291	27501	1.86	1.0E-106	AI479569.1	EST_HUMAN	oc87e08.s1 NCL_CGAP_GOB1 Homo sapiens cDNA clone IMAGE:1354790 3'
7424	17291	27502	1.86	1.0E-106	AI479569.1	EST_HUMAN	oc87e08.s1 NCL_CGAP_GOB1 Homo sapiens cDNA clone IMAGE:1354790 3'
7803	17653	27890	1.32	1.0E-106	BF027310.1	EST_HUMAN	cn03a04.y1 Normal Human Trabecular Bone Cells Homo sapiens cDNA clone NHTBC_cn03a04 random
7803	17653	27891	1.32	1.0E-106	BF027310.1	EST_HUMAN	tnr41f02.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2160699 3' similar to contains MSR1.t3
7880	17730	27975	5.83	1.0E-106	AA604417.1	EST_HUMAN	TAR1 PTR5 repetitive element ;
7880	17730	27976	5.83	1.0E-106	AA604417.1	EST_HUMAN	tnr41f02.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2160699 3' similar to contains MSR1.t3
							TAR1 PTR5 repetitive element ;
							601671674F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3954403 5'
							601671674F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3954403 5'
							np57b10.s1 NCL_CGAP_Br2 Homo sapiens cDNA clone IMAGE:1130395 3'
							np57b10.s1 NCL_CGAP_Br2 Homo sapiens cDNA clone IMAGE:1130395 3'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7901	17751	27990	1.86	1.0E-106	AW363299.1	EST_HUMAN	RC03-C10318-201199-031-e11 CT0318 Homo sapiens cDNA
8019	17869	28113	3.66	1.0E-106	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
8269	18149	28389	5.21	1.0E-106	BF032755.1	EST_HUMAN	601453461F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3857366 5'
8269	18149	28390	5.21	1.0E-106	BF032755.1	EST_HUMAN	601453461F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3857366 5'
8415	18289	28544	2.28	1.0E-106	J05200.1	NT	Human tyrosine receptor mRNA, complete cds
8415	18289	28545	2.28	1.0E-106	J05200.1	NT	Human tyrosine receptor mRNA, complete cds
9122	19540		2.87	1.0E-106	AW410405.1	EST_HUMAN	fr05h11.x1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2961644 5'
9342	19022	25298	2.31	1.0E-106	BE894488.1	EST_HUMAN	601433087F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3918524 5'
9342	19022	25299	2.31	1.0E-106	BE894488.1	EST_HUMAN	601433087F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3918524 5'
9554	19152		5.35	1.0E-106	BE695905.1	EST_HUMAN	RC1-C10249-090800-024-d05 CT0249 Homo sapiens cDNA
234	10203		3.48	1.0E-107	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region; segment 1/2
264	10229		1.05	1.0E-107	X60459.1	NT	Human IFNAR gene for interferon alpha/beta receptor
606	10542		1.07	1.0E-107	4826863	NT	Homo sapiens neuronal cell adhesion molecule (NRCAM) mRNA
614	10550	20361	1.7	1.0E-107	AF155103.1	NT	Homo sapiens NY-REN-25 antigen mRNA, partial cds
796	10725	20565	0.86	1.0E-107	X60459.1	NT	Human IFNAR gene for interferon alpha/beta receptor
868	10704	20644	1.16	1.0E-107	X60459.1	NT	Human IFNAR gene for interferon alpha/beta receptor
963	10877	20724	10.67	1.0E-107	AF154121.1	NT	Homo sapiens sodium-dependent high-affinity dicarboxylate transporter (NADC3) mRNA, complete cds
1257	11164	21015	0.78	1.0E-107	AB032263.1	NT	Homo sapiens BAZ1B mRNA for bromodomain adjacent to zinc finger domain 1B, complete cds
1551	11456	21314	2.13	1.0E-107	BF087405.1	EST_HUMAN	QV2-HT0540-120900-356-a05 HT0540 Homo sapiens cDNA
1718	11619	21488	1.47	1.0E-107	AF136275.1	NT	Homo sapiens cathepsin Z precursor (CTS2) gene, exon 3
1797	11695	21571	0.95	1.0E-107	AB007922.2	NT	Homo sapiens mRNA for KIAA0453 protein, partial cds
1797	11695	21572	0.95	1.0E-107	AB007922.2	NT	Homo sapiens mRNA for KIAA0453 protein, partial cds
2161	12048	21949	1.26	1.0E-107	U13729.1	NT	Human dipeptidyl peptidase IV (CD26) gene, exon 20
2487	12362	22257	0.86	1.0E-107	BE732460.1	EST_HUMAN	601567619F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3842309 5'
2487	12362	22258	0.86	1.0E-107	BE732460.1	EST_HUMAN	601567619F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3842309 5'
2976	12903	22701	1.94	1.0E-107	AW842451.1	EST_HUMAN	PM1-CN0031-190100-001-a03 CN0031 Homo sapiens cDNA
2976	12903	22702	1.94	1.0E-107	AW842451.1	EST_HUMAN	PM1-CN0031-190100-001-a03 CN0031 Homo sapiens cDNA
3061	12988	22779	2.62	1.0E-107	5902097	NT	Homo sapiens SMT3 (suppressor of mit two 3, yeast) homolog 2 (SMT3H2), mRNA
3754	13667	23450	3.92	1.0E-107	AF020671.1	NT	Homo sapiens myotubularin (MTM1) gene, exon 9
5575	15490	25567	3.26	1.0E-107	BE867469.1	EST_HUMAN	601442558F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3846494 5'
6356	16219	26380	1.52	1.0E-107	AW503913.1	EST_HUMAN	UI-HF-BNO-alf-c-08-0-UI.r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3079310 5'
6356	16219	26381	1.52	1.0E-107	AW503913.1	EST_HUMAN	UI-HF-BNO-alf-c-08-0-UI.r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3079310 5'
6445	16306	26471	1.63	1.0E-107	AI765078.1	EST_HUMAN	wh56h04.x1 NCI_CGAP_Kid1f1 Homo sapiens cDNA clone IMAGE:2384791 3'

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Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8087	17978	28228	2.73	1.0E-107	A1392850.1	EST_HUMAN	ig10d06.x1 NCL_CGAP_CLL1 Homo sapiens cDNA clone IMAGE:2108363 3' similar to SW:AACT_DICD)
8316	18193	28443	1.82	1.0E-107	L49141.1	NT	P05095 ALPHA-ACTININ 3, NON MUSCULAR;
8327	18204	28453	1.98	1.0E-107	BF686511.1	EST_HUMAN	Homo sapiens neuroendocrine-specific protein (NSP) gene, exon 4
8638	18503	28779	9.12	1.0E-107	BE540550.1	EST_HUMAN	602123963F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4281039 5'
8697	17881	28122	4.21	1.0E-107	11419701	NT	60106668F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3452829 5'
8697	17881	28123	4.21	1.0E-107	11419701	NT	Homo sapiens HSPC049 protein (HSPC049), mRNA
9187	19673		3.94	1.0E-107	AA001415.1	EST_HUMAN	Homo sapiens HSPC049 protein (HSPC049), mRNA
939	10864	20711	1.46	1.0E-108	BE299042.1	EST_HUMAN	ze4f601.s1 Soares retina N2b4HR Homo sapiens cDNA clone IMAGE:361944 3' similar to contains THR.b1
1244	11151	20989	1.55	1.0E-108	Y18000.1	NT	THR repetitive element;
2282	12166	22063	7.41	1.0E-108	AI686040.1	EST_HUMAN	601177018F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3532348 5'
2282	12166	22064	7.41	1.0E-108	AI686040.1	EST_HUMAN	Homo sapiens NF2 gene
2378	12268	22150	7.2	1.0E-108	BE206694.1	EST_HUMAN	tf91e10.x1 NCL_CGAP_P128 Homo sapiens cDNA clone IMAGE:2248938 3' similar to gb:M14219 BONE
3305	13226	23028	0.94	1.0E-108	AF032897.1	NT	PROTEOGLYCAN II PRECURSOR (HUMAN);
3305	13226	23029	0.94	1.0E-108	AF032897.1	NT	tf91e10.x1 NCL_CGAP_P128 Homo sapiens cDNA clone IMAGE:2248938 3' similar to gb:M14219 BONE
3742	13654	23437	0.92	1.0E-108	5453855	NT	PROTEOGLYCAN II PRECURSOR (HUMAN);
4065	13967	23744	1.33	1.0E-108	AW664438.1	EST_HUMAN	Homo sapiens pericentriolar material 1 (PCM1) mRNA
4425	14320	24108	1.99	1.0E-108	U72961.1	NT	hi12a11.x1 NCL_CGAP_GU1 Homo sapiens cDNA clone IMAGE:2972060 3' similar to SW:3BP1_MOUSE
4425	14320	24107	1.99	1.0E-108	U72961.1	NT	P55194 SH3-BINDING PROTEIN 3BP-1;
4699	14585	24376	2.85	1.0E-108	7661979	NT	Human hepatocyte nuclear factor 4-alpha gene, exon 2
4699	14585	24376	2.85	1.0E-108	7661979	NT	Human hepatocyte nuclear factor 4-alpha gene, exon 2
4699	14585	24376	2.85	1.0E-108	7661979	NT	Homo sapiens KIAA0187 gene product (KIAA0187), mRNA
4699	14585	24376	2.85	1.0E-108	7661979	NT	Homo sapiens KIAA0187 gene product (KIAA0187), mRNA
4699	14585	24376	2.85	1.0E-108	7661979	NT	Homo sapiens KIAA0187 gene product (KIAA0187), mRNA
5366	15286	25120	1.53	1.0E-108	AW384094.1	EST_HUMAN	Homo sapiens PSN1 gene, alternative transcript
5393	15312	25166	2.77	1.0E-108	BE869016.1	EST_HUMAN	RCO-H10372-241199-031-d03 HT0372 Homo sapiens cDNA
5393	15312	25167	2.77	1.0E-108	BE869016.1	EST_HUMAN	601444922F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3848980 5'
5732	15640	25745	5.06	1.0E-108	AF264717.1	NT	601444922F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3848980 5'
5732	15640	25746	5.06	1.0E-108	AF264717.1	NT	Homo sapiens FYVE domain-containing dual specificity protein phosphatase FYVE-DSP2 mRNA, complete
5732	15640	25746	5.06	1.0E-108	AF264717.1	NT	cds
5732	15640	25746	5.06	1.0E-108	AF264717.1	NT	cds
5732	15640	25746	5.06	1.0E-108	AF264717.1	NT	Homo sapiens FYVE domain-containing dual specificity protein phosphatase FYVE-DSP2 mRNA, complete

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Table 4
Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5789	15695	25804	1.37	1.0E-108	AJ133269.1	NT	Homo sapiens cavedin-1/2 locus, Contig1, D7S522, genes CAV2 (exons 1, 2a, and 2b), CAV1 (exons 1 and 2)
6247	16113	26265	5.35	1.0E-108	11431857	NT	Homo sapiens G protein-coupled receptor, family C, group 5, member B (GPCR5B), mRNA
6399	16260	26421	3.34	1.0E-108	4758333	NT	Homo sapiens delta-5 fatty acid desaturase (FADS5D6) mRNA
6698	16578		1.93	1.0E-108	AF083500.1	NT	Homo sapiens connective tissue growth factor-like protein precursor, mRNA, complete cds
8202	15099	24891	2.77	1.0E-108	Y12490.1	NT	Homo sapiens mRNA for Golgi-associated microtubule-binding protein (GMAP-210)
8593	16461	28731	4.26	1.0E-108	AW966185.1	EST_HUMAN	EST1378258 IMAGE resequences, MAGI Homo sapiens cDNA
8677	15665		2.03	1.0E-108	11441465	NT	Homo sapiens G protein-coupled receptor 48 (GPR48), mRNA
8706	12166	22063	4.14	1.0E-108	AI686040.1	EST_HUMAN	tt01et10.x1 NCL CGAP_P128 Homo sapiens cDNA clone IMAGE:2248938 3' similar to gb:M14219 BONE
8706	12166	22064	4.14	1.0E-108	AI686040.1	EST_HUMAN	PROTEOGLYCAN II PRECURSOR (HUMAN);
9357	19030	25303	2.79	1.0E-108	AK024447.1	NT	tt01et10.x1 NCL CGAP_P128 Homo sapiens cDNA clone IMAGE:2248938 3' similar to gb:M14219 BONE
9736	19270		5.59	1.0E-108	BF346356.1	EST_HUMAN	PROTEOGLYCAN II PRECURSOR (HUMAN);
58	10044	19856	0.9	1.0E-109	D86974.1	NT	Homo sapiens mRNA for FLJ00037 protein, partial cds
212	10183	19997	0.92	1.0E-109	11422486	NT	602018571F1 NCL CGAP_Brm67 Homo sapiens cDNA clone IMAGE:4154297 5'
222	10192	20003	1.51	1.0E-109	11438391	NT	Human mRNA for KIAA0220 gene, partial cds
459	10403	20219	3.64	1.0E-109	4507712	NT	Homo sapiens hypothetical protein FLJ11316 (FLJ11316), mRNA
583	10521	20328	14.64	1.0E-109	AB023216.1	NT	Homo sapiens reticulocalbin 1, EF-hand calcium binding domain (RCN1), mRNA
583	10521	20329	14.64	1.0E-109	AB023216.1	NT	Homo sapiens tetradicopeptide repeat domain 2 (TTC2) mRNA
1184	11095	20941	9.63	1.0E-109	M26699.1	NT	Homo sapiens mRNA for KIAA0999 protein, partial cds
1185	11095	20941	4.89	1.0E-109	M26699.1	NT	Homo sapiens mRNA for KIAA0999 protein, partial cds
1831	11728	21602	1.48	1.0E-109	D13643.2	NT	Homo sapiens nuclear phosphoprotein B23 (NPM1) mRNA, complete cds
2194	12081	21965	2.03	1.0E-109	AL163284.2	NT	Homo sapiens nuclear phosphoprotein B23 (NPM1) mRNA, complete cds
2204	12091	21993	1.97	1.0E-109	Y17123.1	NT	Homo sapiens mRNA for KIAA0018 protein, partial cds
2581	12452	22344	3.88	1.0E-109	AI022328.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C084
2581	12452	22345	3.88	1.0E-109	AI022328.1	EST_HUMAN	Homo sapiens SNF5/INI1 gene, exon 6
2582	12453	22345	2.75	1.0E-109	4504206	NT	ow95a01.x1 Scores_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:1654536 3' similar to
3020	12948	22740	1.88	1.0E-109	N85190.1	EST_HUMAN	TR:002197 002197 CIRCULATING CATHODIC ANTIGEN. ;
3342	13262	23068	1.45	1.0E-109	AW893192.1	EST_HUMAN	ow95a01.x1 Scores_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:1654536 3' similar to
3342	13262	23069	1.45	1.0E-109	AW893192.1	EST_HUMAN	TR:002197 002197 CIRCULATING CATHODIC ANTIGEN. ;
							Homo sapiens guanylate cyclase activator 1A (retina) (GUCA1A) mRNA
							J2810F Human fetal heart, Lambda ZAP Express Homo sapiens cDNA clone J2816 5' similar to ZINC
							FINGER PROTEIN ZNF43
							CM3-NN0009-190400-150-f10 NN0009 Homo sapiens cDNA
							CM3-NN0009-190400-150-f10 NN0009 Homo sapiens cDNA

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3474	13390	23195	1.2	1.0E-109	AF240698.1	NT	Homo sapiens retinol dehydrogenase homolog isoform-1 (RDH) mRNA, complete cds
3767	13080		1.53	1.0E-109	BE146144.1	EST_HUMAN	MRO-HT0209-110400-108-a04 HT0209 Homo sapiens cDNA
3911	13821	23601	1.54	1.0E-109	AB011181.2	NT	Homo sapiens mRNA for KIAA0609 protein, partial cds
3911	13821	23602	1.54	1.0E-109	AB011181.2	NT	Homo sapiens mRNA for KIAA0609 protein, partial cds
4054	13956	23732	3.67	1.0E-109	AI655417.1	EST_HUMAN	ts98e06.x1 NCI_CGAP_GC6 Homo sapiens cDNA clone IMAGE:2293930 3' similar to WP:F53A2.8
4070	13972	23749	1.02	1.0E-109	AA662274.1	EST_HUMAN	nu93c12.s1 NCI_CGAP_P122 Homo sapiens cDNA clone IMAGE:1218262 3' similar to SW:GTT2_HUMAN
4070	13972	23750	1.02	1.0E-109	AA662274.1	EST_HUMAN	P30712 GLUTATHIONE S-TRANSFERASE THETA 2 ;
4304	14202	23986	2.25	1.0E-109	4504206	NT	P30712 GLUTATHIONE S-TRANSFERASE THETA 2 ;
4496	14390	24175	1.19	1.0E-109	7682083	NT	Homo sapiens guanylate cyclase activator 1A (retina) (GUCA1A) mRNA
4839	14720	24503	1.04	1.0E-109	R15400.1	EST_HUMAN	Homo sapiens KIAA0377 gene product (KIAA0377), mRNA
4984	14859	24626	0.86	1.0E-109	BE283673.1	EST_HUMAN	ye48e06.r1 Scores infant brain tNIB Homo sapiens cDNA clone IMAGE:53057 5'
4984	14859	24627	0.86	1.0E-109	BE283673.1	EST_HUMAN	601186922F2 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2959636 5'
5254	15176	24950	2.31	1.0E-109	5174622	NT	601186922F2 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2959636 5'
5648	15364		1.48	1.0E-109	BE179356.1	EST_HUMAN	Homo sapiens placental protein 11 (serine proteinase) (P11) mRNA
6465	16325	26491	3.66	1.0E-109	11432574	NT	RC1-HT0615-200400-022-d04 HT0615 Homo sapiens cDNA
6466	16326	26492	5.01	1.0E-109	BF182707.1	EST_HUMAN	Homo sapiens AT-binding transcription factor 1 (ATBF1), mRNA
6466	16328	26493	5.01	1.0E-109	BF182707.1	EST_HUMAN	601809495F1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:4040279 5'
6753	16632	26820	1.36	1.0E-109	AL049784.1	NT	601809495F1 NIH_MGC_18 Homo sapiens cDNA clone IMAGE:4040279 5'
6820	16699	26892	1.23	1.0E-109	AW749130.1	EST_HUMAN	Novel human gene mapping to chromosome 13
7030	16907		1.72	1.0E-109	AA077498.1	EST_HUMAN	PMO-BT0340-091299-002-e05 BT0340 Homo sapiens cDNA
7071	16948	27139	5.71	1.0E-109	BE787540.1	EST_HUMAN	7B18H01 Chromosome 7 Fetal Brain cDNA Library Homo sapiens cDNA clone 7B18H01
7071	16948	27140	5.71	1.0E-109	BE787540.1	EST_HUMAN	601479417F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3882124 5'
7326	17202	27402	2	1.0E-109	H84860.1	EST_HUMAN	601479417F1 NIH_MGC_68 Homo sapiens cDNA clone IMAGE:3882124 5'
7462	17322	27528	1.41	1.0E-109	F06604.1	EST_HUMAN	ys90g08.r1 Scores retina N2b5HR Homo sapiens cDNA clone IMAGE:222110 5' similar to SP:A53491
8155	18043	28294	2.93	1.0E-109	BE540909.1	EST_HUMAN	A53491 BUMETANIDE-SENSITIVE NA-K-Cl COTRANSPORTER - SPINX ;
8155	18043	28295	2.93	1.0E-109	BE540909.1	EST_HUMAN	HSC1EC121 normalized infant brain cDNA Homo sapiens cDNA clone c-1ec12
8183	18069	28318	14.2	1.0E-109	BF694831.1	EST_HUMAN	601063030F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3449599 5'
8335	18212	28494	2.12	1.0E-109	7682279	NT	601063030F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3449599 5'
8335	18212	28495	2.12	1.0E-109	7682279	NT	602080724F2 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4245341 5'
8468	18341	28606	1.88	1.0E-109	AU121370.1	EST_HUMAN	Homo sapiens KIAA0744 gene product; histone deacetylase 7 (KIAA0744), mRNA
							Homo sapiens KIAA0744 gene product; histone deacetylase 7 (KIAA0744), mRNA
							AU121370 HEMBB1 Homo sapiens cDNA clone HEMBB1002690 5'

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8676	18564	28848	2.19	1.0E-109	4502838	NT	Homo sapiens Chediak-Higashi syndrome 1 (CHS1) mRNA
8710	18527	28810	4.83	1.0E-109	W16510.1	EST_HUMAN	z808b12.r1 Soares, fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:301439 5' similar to
9259	12091	21993	1.65	1.0E-109	Y17123.1	NT	PIR:S43969 S43969 p54-beta stress-activated protein kinases - rat;
9504	19176	25275	2.8	1.0E-109	AB011399.1	NT	Homo sapiens SNF5/INI1 gene, exon 6
3	9990	19781	1.48	1.0E-110	7549804	NT	Homo sapiens gene for AF-6, complete cds
34	10021	19817	3.88	1.0E-110	5803073	NT	Homo sapiens deiodinase, iodothyronine, type II (DIO2), transcript variant 2, mRNA
34	10021	19818	3.88	1.0E-110	5803073	NT	Homo sapiens leucine-zipper-like transcriptional regulator, 1 (LZTR1), mRNA
75	10059	19876	30.63	1.0E-110	C04498.1	EST_HUMAN	Homo sapiens leucine-zipper-like transcriptional regulator, 1 (LZTR1), mRNA
104	9990	19781	1.87	1.0E-110	7549804	NT	C04498 Human heart cDNA (YNakamura) Homo sapiens cDNA clone 3NHC3467
291	10255	20076	0.91	1.0E-110	D87291.1	NT	Homo sapiens deiodinase, iodothyronine, type II (DIO2), transcript variant 2, mRNA
516	10458	20269	1.16	1.0E-110	U84530.1	NT	Human mRNA for inward rectifier potassium channel, complete cds
1163	11076	20921	1.09	1.0E-110	5031620	NT	Human dystrobrevin (DTN) gene, exon 20
1258	11165	21016	1.01	1.0E-110	AB032253.1	NT	Homo sapiens calcitonin receptor-like (CALORL) mRNA
1879	11775	21650	1.5	1.0E-110	BE379477.1	EST_HUMAN	Homo sapiens BAZ1B mRNA for bromodomain adjacent to zinc finger domain 1B, complete cds
2012	11904		1.86	1.0E-110	BF508896.1	EST_HUMAN	U1-H-B14-aos-b-05-0-J1.s1 NCI_CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3085784 3'
2810	12739		1.02	1.0E-110	4503098	NT	Homo sapiens chondroitin sulfate proteoglycan 4 (melanoma-associated) (CSPG4), mRNA
3048	12975		1.07	1.0E-110	U78027.1	NT	Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein (L44L) and FTP3 (FTP3) genes, complete cds
3158	13083	22885	1.87	1.0E-110	11436041	NT	Homo sapiens pregnancy-zone protein (PZP), mRNA
3158	13083	22886	1.87	1.0E-110	11436041	NT	Homo sapiens pregnancy-zone protein (PZP), mRNA
3966	13873	23650	0.92	1.0E-110	BE018556.1	EST_HUMAN	b82a05.y1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3048848 5' similar to TR:O60312 O60312 KIAA0566 PROTEIN;
4533	14426	24207	2.06	1.0E-110	A017213.1	EST_HUMAN	ou32b10.x1 Soares, NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1627963 3' similar to
4555	14447	24232	2.08	1.0E-110	AU117812.1	EST_HUMAN	SW:N121_RAT P52591 NUCLEAR ENVELOPE PORE MEMBRANE PROTEIN POM 121;
4898	14778		2.34	1.0E-110	7662441	NT	AU117812 HEMBA1 Homo sapiens cDNA clone HEMBA1002241 5'
5237	15161	24929	1.9	1.0E-110	BE299406.1	EST_HUMAN	Homo sapiens KIAA1002 protein (KIAA1002), mRNA
5511	15429	25492	7.34	1.0E-110	11419323	NT	601118710F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3028538 5'
5511	15429	25493	7.34	1.0E-110	11419323	NT	Homo sapiens hypothetical protein FLJ10300 (FLJ10300), mRNA
6032	19458	26068	4.36	1.0E-110	M55112.1	NT	Homo sapiens hypothetical protein FLJ10300 (FLJ10300), mRNA
6391	16283	26413	10.04	1.0E-110	AV714276.1	EST_HUMAN	Human cystic fibrosis transmembrane conductance regulator (CFTR) gene, exon 7
6391	16283	26414	10.04	1.0E-110	AV714276.1	EST_HUMAN	AV714276 DCB Homo sapiens cDNA clone DCBQGE01 5'
6409	16270	26432	2.7	1.0E-110	AB020875.1	NT	AV714276 DCB Homo sapiens cDNA clone DCBQGE01 5'
							Homo sapiens mRNA for KIAA0868 protein, partial cds

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Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7523	17374	27583	2.91	1.0E-110	AW838394.1	EST_HUMAN	QV2-LT0053-020400-119-e04.LT0053 Homo sapiens cDNA
7915	17765	28004	4.27	1.0E-110	11432732	NT	Homo sapiens galactokinase 2 (GALK2), mRNA
8130	18018	28266	3.7	1.0E-110	Y12337.1	NT	H. sapiens mRNA for myotonic dystrophy protein kinase like protein
8334	18211	28462	3.49	1.0E-110	BE734357.1	EST_HUMAN	601565604F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3840433 5'
8334	18211	28463	3.49	1.0E-110	BE734357.1	EST_HUMAN	601565604F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3840433 5'
8740	17889	28133	2.43	1.0E-110	AA446529.1	EST_HUMAN	zw07g02.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:781298 5' similar to TR:G1145816
9081	18857		4.15	1.0E-110	BE897218.1	EST_HUMAN	G1145816 FKBP54;
9204	18935		5.78	1.0E-110	AW062258.1	EST_HUMAN	601439784F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3924548 5'
9444	19080		1.63	1.0E-110	AB011399.1	NT	IL0-BT0163-040899-094-g10 BT0163 Homo sapiens cDNA
9578	19684		5.07	1.0E-110	BF364546.1	EST_HUMAN	Homo sapiens gene for AF-6, complete cds
168	10140		16.85	1.0E-111	U43701.1	NT	PM3-NN1082-140900-006-F12 NN1082 Homo sapiens cDNA
189	10181	19978	1.02	1.0E-111	4758807	NT	Human ribosomal protein L23a mRNA, complete cds
718	10650		1.87	1.0E-111	BF035327.1	EST_HUMAN	Homo sapiens ras GTPase activating protein-like (NGAP) mRNA
726	10658	20489	3.58	1.0E-111	8393092	NT	601498531F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3862086 5'
911	10835	20684	73.62	1.0E-111	M25142.1	NT	Homo sapiens cat eye syndrome critical region gene 1 (CECR1), mRNA
3642	13556	23342	1.17	1.0E-111	6912641	NT	Human cardiac alpha-myosin heavy chain (MYH6) gene, exons 32 to 34
3642	13556	23343	1.17	1.0E-111	6912641	NT	Homo sapiens sex comb on midleg homolog 1 (SCMH1), mRNA
4080	13982	23760	1.08	1.0E-111	7661569	NT	Homo sapiens sex comb on midleg homolog 1 (SCMH1), mRNA
4235	14133	23909	4.45	1.0E-111	K02298.1	NT	Homo sapiens DKFZP434D156 protein (DKFZP434D156), mRNA
5364	15284	25117	2.82	1.0E-111	AA151017.1	EST_HUMAN	Human enkephalin B (enkeB) gene, exon 4 and 3' flank and complete cds
5364	15284	25118	2.82	1.0E-111	AA151017.1	EST_HUMAN	z147b07.r1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:505045 5' similar to gb:M23575 PREGNANCY-SPECIFIC BETA-1 GLYCOPROTEIN C PRECURSOR (HUMAN);
5675	15584	25685	1.71	1.0E-111	AI344679.1	EST_HUMAN	z147b07.r1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:505045 5' similar to gb:M23575 PREGNANCY-SPECIFIC BETA-1 GLYCOPROTEIN C PRECURSOR (HUMAN);
6402	16283	28423	3.03	1.0E-111	BF366228.1	EST_HUMAN	qp09g12.x1 NCL_CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1917574 3' similar to gb:M29893 RAS-RELATED PROTEIN RAL-A (HUMAN);
6579	16437	26622	2.29	1.0E-111	AA133914.1	EST_HUMAN	IL2-NT0101-280700-114-E03 NT0101 Homo sapiens cDNA
6795	16874	28866	3.13	1.0E-111	U65533.1	NT	z162c12.r1 Straigene muscle 937209 Homo sapiens cDNA clone IMAGE:562774 5' similar to gb:X03740 MYOSIN HEAVY CHAIN, SKELETAL MUSCLE (HUMAN);
7113	16990		10.8	1.0E-111	BE214902.1	EST_HUMAN	Human beta4-integrin (ITGB4) gene, exon 13
7149	17026	27221	13.75	1.0E-111	X17033.1	NT	601847132F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4078303 5'
7149	17026	27222	13.75	1.0E-111	X17033.1	NT	Human mRNA for integrin alpha-2 subunit
7251	17128	27321	3.26	1.0E-111	AF091395.1	NT	Human mRNA for integrin alpha-2 subunit
							Homo sapiens Trio isoform mRNA, complete cds

Table 4
Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7840	17690	27935	1.51	1.0E-111	AA504160.1	EST_HUMAN	aa58g02.s1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:825170 3' similar to gb.L09235
7893	17743	27986	6.35	1.0E-111	AA131248.1	EST_HUMAN	VACUOLAR ATP SYNTHASE CATALYTIC SUBUNIT A, UBIQUITOUS (HUMAN);
8401	18277	28529	4.52	1.0E-111	U68159.1	NT	z13101.r1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:503545 5'
9038	18825	29110	3.04	1.0E-111	11417901	NT	Human thrombopoietin receptor (MPL) gene, exons 1,2,3,4,5 and 6
9686	19489	25130	1.89	1.0E-111	W22562.1	EST_HUMAN	Homo sapiens meningioma (disrupted in balanced translocation) 1 (MN1), mRNA
9959	19422	25171	1.39	1.0E-111	11430460	NT	72C9 Human retina cDNA Tsp509I-cleaved sublibrary Homo sapiens cDNA not directional
9959	19422	25172	1.39	1.0E-111	11430460	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
592	10528	20335	2.66	1.0E-112	4501854	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
594	10530	20337	4.49	1.0E-112	U29103.1	NT	Homo sapiens acetyl-Coenzyme A carboxylase beta (ACACB), mRNA
594	10530	20338	4.49	1.0E-112	U29103.1	NT	Human steroidogenic acute regulatory protein (STAR) gene, exon 5
616	10552	20363	1.48	1.0E-112	BF509039.1	EST_HUMAN	Human steroidogenic acute regulatory protein (STAR) gene, exon 5
616	10552	20364	1.48	1.0E-112	BF509039.1	EST_HUMAN	UIH-B14-aot-g-04-0-J1.s1 NCL_CGAP_SubB8 Homo sapiens cDNA clone IMAGE:3086023 3'
985	10908	20753	2.78	1.0E-112	AF157623.1	NT	UIH-B14-aot-g-04-0-J1.s1 NCL_CGAP_SubB8 Homo sapiens cDNA clone IMAGE:3086023 3'
1046	10964	20805	1.72	1.0E-112	P52742	SWISSPROT	Homo sapiens HTRA serine protease (PRSS11) gene, complete cds
1658	11560	21424	5.88	1.0E-112	7662125	NT	ZINC FINGER PROTEIN 135
1658	11560	21425	5.88	1.0E-112	7662125	NT	Homo sapiens KIAA0440 protein (KIAA0440), mRNA
2460	12337	22231	2.45	1.0E-112	BE866859.1	EST_HUMAN	Homo sapiens KIAA0440 protein (KIAA0440), mRNA
3809	13721	23510	0.83	1.0E-112	BE076073.1	EST_HUMAN	601442674F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3846858 5'
4646	14533	24321	5.12	1.0E-112	AB037832.1	NT	MR2-BT0590-090300-113-f09 BT0590 Homo sapiens cDNA
4646	14533	24322	5.12	1.0E-112	AB037832.1	NT	Homo sapiens mRNA for KIAA1411 protein, partial cds
5170	15036	24804	0.94	1.0E-112	9055269	NT	Homo sapiens mRNA for KIAA1411 protein, partial cds
5477	15397	25463	33.34	1.0E-112	N46046.1	EST_HUMAN	Homo sapiens low density lipoprotein receptor related protein-deleted in tumor (LRPDI1), mRNA
6340	16203	26364	1.81	1.0E-112	11416777	NT	Y35d07.r1 Soares melanocyte 2NblHM Homo sapiens cDNA clone IMAGE:273229 5'
6340	16203	26365	1.81	1.0E-112	11416777	NT	Homo sapiens solute carrier family 6 (neurotransmitter transporter, L-proline), member 7 (SLC6A7), mRNA
6766	16645	26934	1.65	1.0E-112	AU118051	EST_HUMAN	Homo sapiens solute carrier family 6 (neurotransmitter transporter, L-proline), member 7 (SLC6A7), mRNA
7181	17058	27247	2.25	1.0E-112	BE867635.1	EST_HUMAN	AU118051 HEMBA1 Homo sapiens cDNA clone HEMBA1002773 5'
7181	17058	27248	2.25	1.0E-112	BE867635.1	EST_HUMAN	601443151F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3847285 5'
7693	17543	27767	2.09	1.0E-112	BF111413.1	EST_HUMAN	601443151F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3847285 5'
8159	18047	28239	4.25	1.0E-112	AW863327.1	EST_HUMAN	730g07.x1 Soares_NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:3523020 3' similar to
8318	18195	28445	2.86	1.0E-112	AJ249900.1	NT	TR:Q9VW35 Q9VW35 CG8743 PROTEIN ;
							MR3-SN0009-100400-108-b12 SN0009 Homo sapiens cDNA
							Homo sapiens mRNA for secreted modular calcium-binding protein (smoc1) gene

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8445	18319	28578	1.72	1.0E-112	BE280479.1	EST_HUMAN	601155323F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3138989 5'
8500	18373	28637	1.75	1.0E-112	AI792603.1	EST_HUMAN	qk24c08.y5 NCI_CGAP_Kid3 Homo sapiens cDNA clone IMAGE:1869902 5' similar to TR:Q64362 Q64362 FUSED TOES;
8500	18373	28638	1.75	1.0E-112	AI792603.1	EST_HUMAN	qk24c08.y5 NCI_CGAP_Kid3 Homo sapiens cDNA clone IMAGE:1869902 5' similar to TR:Q64362 Q64362 FUSED TOES;
8521	18393	28657	5	1.0E-112	AW377670.1	EST_HUMAN	PM0-CT0237-141089-001-h02 CT0237 Homo sapiens cDNA
725	10657	20487	3.71	1.0E-113	AI365596.1	EST_HUMAN	ao95f01.x1 Schiller meningioma Homo sapiens cDNA clone IMAGE:1953625 3'
725	10657	20488	3.71	1.0E-113	AI365596.1	EST_HUMAN	ao95f01.x1 Schiller meningioma Homo sapiens cDNA clone IMAGE:1953625 3'
927	10652	20700	6.32	1.0E-113	M11965.1	NT	Human X-linked phosphoglycerate kinase gene, exon 8
1523	11428	21286	2.94	1.0E-113	AI365596.1	EST_HUMAN	ao95f01.x1 Schiller meningioma Homo sapiens cDNA clone IMAGE:1953625 3'
2048	11939	21833	1.18	1.0E-113	BF515218.1	EST_HUMAN	UI-HBW1-aml-f-03-0-U1.s1 NCI_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3082876 3'
2405	12282	22179	0.96	1.0E-113	AJ006976.1	NT	Homo sapiens PLP gene
3091	13018	22813	2.34	1.0E-113	AJ223948.1	NT	Homo sapiens mRNA for putative RNA helicase, 3' end
5035	14907	24677	0.95	1.0E-113	7657065	NT	Homo sapiens v-ets avian erythroblastosis virus E28 oncogene related (ERG), mRNA
5035	14907	24678	0.95	1.0E-113	7657065	NT	Homo sapiens v-ets avian erythroblastosis virus E28 oncogene related (ERG), mRNA
5211	19524		16.27	1.0E-113	BE780858.1	EST_HUMAN	601469465F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3872536 5'
5377	15297	25144	6.33	1.0E-113	AU127214.1	EST_HUMAN	AU127214 NT2RP2 Homo sapiens cDNA clone NT2RP2000807 5'
5608	15523	25605	3.92	1.0E-113	AU140291.1	EST_HUMAN	AU140291 PLACE2 Homo sapiens cDNA clone PLACE2000274 5'
5699	15608	25710	2.05	1.0E-113	11525737	NT	Homo sapiens UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetyl-galactosaminyltransferase 8 (GalNAc-T8) (GALNT8), mRNA
7257	17134	27326	2.95	1.0E-113	BE382842.1	EST_HUMAN	601297709F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3627554 5'
7257	17134	27327	2.95	1.0E-113	BE382842.1	EST_HUMAN	601297709F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3627554 5'
7656	17506	27731	1.29	1.0E-113	11429367	NT	Homo sapiens transmembrane protein 2 (TMEM2), mRNA
8466	18339	28604	1.73	1.0E-113	AW500519.1	EST_HUMAN	UI-HF-BNO-akj-b-12-0-U1.r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3077326 5'
8550	15719	25832	2.07	1.0E-113	6006002	NT	Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2A (GRIN2A) mRNA
8550	15719	25833	2.07	1.0E-113	6006002	NT	Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2A (GRIN2A) mRNA
8584	18452	28721	3.44	1.0E-113	BE292968.1	EST_HUMAN	601105529F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2988366 5'
629	10566	20379	7.66	1.0E-114	T70551.1	EST_HUMAN	ydl5c01.s1 Soares fetal liver spleen 1NfLS Homo sapiens cDNA clone IMAGE:108288 3' similar to gb:A21187 ALPHA-2-MACROGLOBULIN PRECURSOR (HUMAN); contains Alu repetitive element;
1055	10972	20815	1.31	1.0E-114	8923087	NT	Homo sapiens hypothetical protein FLJ20080 (FLJ20080), mRNA
1291	11198	21053	3.47	1.0E-114	7657529	NT	Homo sapiens rhabdoid tumor deletion region protein 1 (RTDR1), mRNA
1648	11552	21413	5.53	1.0E-114	6679073	NT	Homo sapiens nucleoporin-like protein 1 (NLP_1), mRNA
2773	10025	19823	0.82	1.0E-114	AB033102.1	NT	Homo sapiens mRNA for KIAA1276 protein, partial cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2773	10026	19824	0.82	1.0E-114	AB033102.1	NT	Homo sapiens mRNA for KIAA1276 protein, partial cds
3092	13019	22814	2.29	1.0E-114	X04086.1	NT	Human gene for catalase (EC 1.11.1.6) exon 2 mapping to chromosome 11, band p13
3135	13060	22859	1.2	1.0E-114	BF206374.1	EST_HUMAN	601869932F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4100214 5'
3934	13843	23621	1.95	1.0E-114	AF149773.1	NT	Homo sapiens NOD1 protein (NOD1) gene, exons 1, 2, and 3
5120	14988	24762	1.2	1.0E-114	AA194468.1	EST_HUMAN	zq05e05.r1 Stratagene muscle 937209 Homo sapiens cDNA clone IMAGE:628832 5' similar to contains
5121	14989	24763	2.31	1.0E-114	AF004849.1	NT	MER22.13 MER22 repetitive element ;
5316	15237	25040	1.37	1.0E-114		NT	Homo sapiens PKY protein kinase mRNA, complete cds
5316	15237	25041	1.37	1.0E-114		NT	Homo sapiens sema domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 5A (SEMA5A) mRNA
6316	16179	26338	7.08	1.0E-114	Y18000.1	NT	Homo sapiens sema domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 5A (SEMA5A) mRNA
6316	16179	26339	7.08	1.0E-114	Y18000.1	NT	Homo sapiens NF2 gene
6906	16486	26673	1.86	1.0E-114	4557600	NT	Homo sapiens NF2 gene
6748	16627	26814	1.73	1.0E-114	AB353139.1	EST_HUMAN	Homo sapiens gamma-aminobutyric acid (GABA) A receptor, alpha 2 (GABRA2) mRNA
6748	16627	26815	1.73	1.0E-114	AB353139.1	EST_HUMAN	cy68d06.x1 NCI CGAP_Brn25 Homo sapiens cDNA clone IMAGE:2017163 3'
7048	16925	27116	3.39	1.0E-114	U63041.1	NT	cy68d06.x1 NCI CGAP_Brn25 Homo sapiens cDNA clone IMAGE:2017163 3'
7090	16967	27161	6.35	1.0E-114	AB011133.1	NT	Human neural cell adhesion molecule CD56 mRNA, complete cds
7090	16967	27162	6.35	1.0E-114	AB011133.1	NT	Homo sapiens mRNA for KIAA0561 protein, partial cds
7418	17285		3.79	1.0E-114	AW327455.1	EST_HUMAN	Homo sapiens mRNA for KIAA0561 protein, partial cds
7447	16459	26652	3.13	1.0E-114	AF077754.1	NT	cyq03f05.x1 NIH_MGC_2 Homo sapiens cDNA clone IMAGE:2846744 5'
7844	17694	27940	1.31	1.0E-114	AL163227.2	NT	Homo sapiens tyrosine kinase pp60c-src (SRC) gene, exon 12 and partial cds
						NT	Homo sapiens chromosome 21 segment HS21C027
							ba73g12.y1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2906086 5' similar to gb:X17206 40S
8167	18055		7.14	1.0E-114	BE302666.1	EST_HUMAN	RIBOSOMAL PROTEIN S4 (HUMAN); gb:M20632 Mouse LLRep3 protein mRNA from a repetitive element, complete (MOUSE);
8527	18399	28666	4.58	1.0E-114	AV733454.1	EST_HUMAN	AV733454 cda Homo sapiens cDNA clone cdABA08 5'
8527	18399	28667	4.58	1.0E-114	AV733454.1	EST_HUMAN	AV733454 cda Homo sapiens cDNA clone cdABA08 5'
8834	18647	28932	2.86	1.0E-114	AV733454.1	EST_HUMAN	AV733454 cda Homo sapiens cDNA clone cdABA08 5'
8834	18647	28933	2.86	1.0E-114	AV733454.1	EST_HUMAN	AV733454 cda Homo sapiens cDNA clone cdABA08 5'
9479	19748		3.21	1.0E-114	11418041	NT	Homo sapiens TNF-inducible protein CG12-1 (CG12-1), mRNA
9729	19266	25222	3.06	1.0E-114	11034850	NT	Homo sapiens hypothetical protein (DJ1042K10.2), mRNA
9729	19266	25223	3.06	1.0E-114	11034850	NT	Homo sapiens hypothetical protein (DJ1042K10.2), mRNA
21	10008	19801	3.36	1.0E-115	4758111	NT	Homo sapiens HLA-B associated transcript1-1 (D6S81E) mRNA
125	10059	19920	0.95	1.0E-115	4505638	NT	Homo sapiens polymerase (RNA) II (DNA directed) polioviruslike A (220kD) (POLR2A) mRNA

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
129	10103		1.99	1.0E-115	4557887	NT	Homo sapiens keratin 18 (KRT18) mRNA
289	10263	20073	2.17	1.0E-115	AW804759.1	EST_HUMAN	QV4-UM0094-300300-156-b08 UM0094 Homo sapiens cDNA
525	10467	20278	1.08	1.0E-115	A1339206.1	EST_HUMAN	q06f01.x1 NCI CGAP GC4 Homo sapiens cDNA clone IMAGE:1946809 3' similar to TR:O00536 O00536 TTF-I INTERACTING PEPTIDE 5;
525	10467	20279	1.08	1.0E-115	A1339206.1	EST_HUMAN	q06f01.x1 NCI CGAP GC4 Homo sapiens cDNA clone IMAGE:1946809 3' similar to TR:O00536 O00536 TTF-I INTERACTING PEPTIDE 5;
769	10699	20537	1.83	1.0E-115	5174702	NT	Homo sapiens transforming growth factor beta-activated kinase-binding protein 1 (TAB1), mRNA
769	10699	20538	1.83	1.0E-115	5174702	NT	Homo sapiens transforming growth factor beta-activated kinase-binding protein 1 (TAB1), mRNA
771	10701	20540	49.82	1.0E-115	4503794	NT	Homo sapiens ferritin, heavy polypeptide 1 (FTH1) mRNA
1539	11443	21301	0.92	1.0E-115	AF229180.1	NT	Homo sapiens alpha-aminoadipate semialdehyde synthase mRNA, complete cds
1539	11443	21302	0.92	1.0E-115	AF229180.1	NT	Homo sapiens alpha-aminoadipate semialdehyde synthase mRNA, complete cds
1785	11683	21561	3.14	1.0E-115	AJ277892.1	NT	Homo sapiens partial TTN gene for titin
1798	11696	21573	1.42	1.0E-115	U76027.1	NT	Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein (L44L) and FIP3 (FIP3) genes, complete cds
2034	11925	21817	0.87	1.0E-115	BE745469.1	EST_HUMAN	601579638F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3928832 5'
2034	11925	21818	0.87	1.0E-115	BE745469.1	EST_HUMAN	601579638F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3928832 5'
2820	12749		1.76	1.0E-115	AW804759.1	EST_HUMAN	QV4-UM0094-300300-156-b08 UM0094 Homo sapiens cDNA
3077	13004	22795	2.1	1.0E-115	AJ245622.1	NT	Homo sapiens mRNA for alpha-tubulin 8 (TUBA8 gene)
3077	13004	22796	2.1	1.0E-115	AJ245622.1	NT	Homo sapiens mRNA for alpha-tubulin 8 (TUBA8 gene)
3427	13344	23149	4.03	1.0E-115	AJ277892.1	NT	Homo sapiens partial TTN gene for titin
3956	13864	23640	4.04	1.0E-115	AB002348.2	NT	Homo sapiens mRNA for KIAA0350 protein, partial cds
4109	14069	23644	1.09	1.0E-115	AL137163.1	NT	Novel human gene mapping to chromosome X
4301	14199	23983	3.41	1.0E-115	6912659	NT	Homo sapiens sir2-like 3 (SIRT3), mRNA
4335	14232	24014	3.83	1.0E-115	4758279	NT	Homo sapiens EphA4 (EPHA4) mRNA
4578	14468	24254	2.58	1.0E-115	AL096857.1	NT	Novel human mRNA from chromosome 1, which has similarities to BAT2 genes
4578	14468	24255	2.58	1.0E-115	AL096857.1	NT	Novel human mRNA from chromosome 1, which has similarities to BAT2 genes
4813	14696	24482	2.96	1.0E-115	AL163268.2	NT	Homo sapiens chromosome 21 segment HS21C068
4813	14696	24483	2.96	1.0E-115	AL163268.2	NT	Homo sapiens chromosome 21 segment HS21C068
5279	15201	24977	1.75	1.0E-115	AW970335.1	EST_HUMAN	EST382416 IMAGE resequences, MAGK Homo sapiens cDNA
5330	15250	25055	7.22	1.0E-115	BF066387.1	EST_HUMAN	602119346F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4276738 5'
5402	15321	25369	2.05	1.0E-115	11425128	NT	Homo sapiens similar to ER to nucleus signalling 1 (H. sapiens) (LOC63433), mRNA
5402	15321	25370	2.05	1.0E-115	11425128	NT	Homo sapiens similar to ER to nucleus signalling 1 (H. sapiens) (LOC63433), mRNA
5852	15758	25376	12.92	1.0E-115	11426038	NT	Homo sapiens similar to ribosomal protein S26 (H. sapiens) (LOC63436), mRNA
5933	15838	25960	1.93	1.0E-115	7661883	NT	Homo sapiens KIAA0054 gene product, Helicase (KIAA0054), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5933	15838	25961	1.93	1.0E-115	7661883	NT	Homo sapiens KIAA0054 gene product; Helicase (KIAA0054), mRNA
6313	16176	26333	1.55	1.0E-115	AJ076598.1	EST_HUMAN	oz31a06.x1 Soares fetal_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:1676914 3'
6313	16176	26334	1.55	1.0E-115	AJ076599.1	EST_HUMAN	oz31a06.x1 Soares fetal_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:1676914 3'
6379	16241	26401	7.41	1.0E-115	AB023212.1	NT	Homo sapiens mRNA for KIAA0995 protein, partial cds
6744	16623	26811	12.78	1.0E-115	BE830187.1	EST_HUMAN	RC6-ET0081-130700-011-G01 ET0081 Homo sapiens cDNA
6744	16623	26812	12.78	1.0E-115	BE830187.1	EST_HUMAN	RC6-ET0081-130700-011-G01 ET0081 Homo sapiens cDNA
7116	16993	27184	2.2	1.0E-115	11434772	NT	Homo sapiens eukaryotic translation initiation factor 4B (EIF4B), mRNA
7745	17595	27816	1.92	1.0E-115	AB002336.1	NT	Human mRNA for KIAA0338 gene, partial cds
7745	17595	27817	1.92	1.0E-115	AB002336.1	NT	Human mRNA for KIAA0338 gene, partial cds
8100	17990	28239	3.5	1.0E-115	AW571544.1	EST_HUMAN	xx3208.x1 NCL_CGAP_U1 Homo sapiens cDNA clone IMAGE:2839239 3' similar to SW:CAYP_CANFA P10463 CALCYPHOSINE
8701	18519	28801	2.26	1.0E-115	4502528	NT	Homo sapiens calcium channel, voltage-dependent, alpha 1E subunit (CACNA1E) mRNA
560	10500	20306	1.42	1.0E-116	BE275502.1	EST_HUMAN	601121347F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2888875 5'
783	10713	20562	1.25	1.0E-116	4507334	NT	Homo sapiens synaptotagmin 1 (SYNJ1), mRNA
841	10768		6.89	1.0E-116	4507334	NT	Homo sapiens synaptotagmin 1 (SYNJ1), mRNA
1952	11847	21733	2.38	1.0E-116	5174478	NT	Homo sapiens pericentrin (PCNT) mRNA
1952	11847	21734	2.38	1.0E-116	5174478	NT	Homo sapiens pericentrin (PCNT) mRNA
1980	11873	21765	1.21	1.0E-116	AU133080.1	EST_HUMAN	AU133080 NT2RP4 Homo sapiens cDNA clone NT2RP4001228 5'
2050	12711	21834	1.01	1.0E-116	M19824.1	NT	Human apolipoprotein B-100 (apoB) gene, exons 17 and 18
2050	12711	21835	1.01	1.0E-116	M19824.1	NT	Human apolipoprotein B-100 (apoB) gene, exons 17 and 18
2259	12143	22042	1.88	1.0E-116	5453941	NT	Homo sapiens protein phosphatase, EF hand calcium-binding domain 1 (PPEF1) mRNA
2293	12175		1.49	1.0E-116	U76308.1	NT	Human olfactory receptor olfr17-201-1 (OR17-201-1) gene, olfactory receptor olfr17-32 (OR17-32) gene and olfactory receptor pseudo_olfr17-01 (OR17-01) pseudogene, complete cds
2407	12284	22181	4.48	1.0E-116	AB018333.1	NT	Homo sapiens mRNA for KIAA0790 protein, partial cds
2704	12656	22458	2.19	1.0E-116	BE889256.1	EST_HUMAN	60151337F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3914600 5'
3137	13062	22860	4.73	1.0E-116	L77570.1	NT	Homo sapiens DiGeorge syndrome critical region, centromeric end
3137	13062	22861	4.73	1.0E-116	L77570.1	NT	Homo sapiens DiGeorge syndrome critical region, centromeric end
4281	14180	23658	2.01	1.0E-116	5031954	NT	Homo sapiens sodium phosphate transporter 3 (NPT3) mRNA
4747	14632	24418	2.17	1.0E-116	AJ907096.1	EST_HUMAN	PM-BT135-070499-016 BT135 Homo sapiens cDNA
5122	14990	24764	1.2	1.0E-116	AJ243213.1	NT	Homo sapiens partial 5-HT4 receptor gene, exons 2 to 5
5637	15550	25641	5.88	1.0E-116	W42822.1	EST_HUMAN	zc24d07.r1 Soares senescent fibroblasts. NbfHSF Homo sapiens cDNA clone IMAGE:323245 5' similar to SW:MDHM_MOUSE P08249 MALATE DEHYDROGENASE, MITOCHONDRIAL PRECURSOR ;
5768	15675	25781	1.65	1.0E-116	AB046856.1	NT	Homo sapiens mRNA for KIAA1636 protein, partial cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5768	15675	25782	1.85	1.0E-116	AB046856.1	NT	Homo sapiens mRNA for KIAA1636 protein, partial cds
5853	15759	25877	72.79	1.0E-116	BF677910.1	EST_HUMAN	602084730F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4249087 5'
5924	15829		1.8	1.0E-116	BE158133.1	EST_HUMAN	MR2-HT0379-210200-102-b04 HT0379 Homo sapiens cDNA
6145	16018	26156	3.59	1.0E-116	C02944.1	EST_HUMAN	C02944 Human heart cDNA (YNakamura) Homo sapiens cDNA clone 3NH00567
6275	16139	26295	7.97	1.0E-116	AV716314.1	EST_HUMAN	AV716314 DCB Homo sapiens cDNA clone DCBCCG06 5'
6874	16753	26949	1.99	1.0E-116	AA354256.1	EST_HUMAN	EST62685 Jurkat T-cells V Homo sapiens cDNA 5' end similar to keratin 2
6874	16753	26950	1.99	1.0E-116	AA354256.1	EST_HUMAN	EST62685 Jurkat T-cells V Homo sapiens cDNA 5' end similar to keratin 2
7173	17050	27239	1.43	1.0E-116	BE65507.1	EST_HUMAN	601336288F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3680680 5'
7260	17137	27330	1.98	1.0E-116	AI216352.1	EST_HUMAN	q109c05.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1844168 3' similar to gb:X53741.maf1 FIBULIN-1, ISOFORM A PRECURSOR (HUMAN);
7577	17428	27642	1.77	1.0E-116	11418646	NT	Homo sapiens laminin, alpha 2 (merosin, congenital muscular dystrophy) (LAMA2), mRNA
8074	17955	28216	3.68	1.0E-116	BF335849.1	EST_HUMAN	CM2-CT0482-300800-349-e06 C10482 Homo sapiens cDNA
8477	18350	28615	3.23	1.0E-116	AI367140.1	EST_HUMAN	qq41e04.x1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:1935102 3' similar to WP:B0495.7
9591	19741		2.08	1.0E-116	BE258569.1	EST_HUMAN	CE01765.7
9776	19614		2.68	1.0E-116	AL134889.1	EST_HUMAN	601108350F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3344580 5'
546	10487	20296	1.18	1.0E-117	4826636	NT	DKFZp762L1110_r1 762 (synonym: hmel2) Homo sapiens cDNA clone DKFZp762L1110 5'
1061	12684	20821	1.59	1.0E-117	AF124393.1	NT	Homo sapiens acetyl-Coenzyme A carboxylase alpha (ACACA), mRNA
1719	11620	21489	6.25	1.0E-117	AF123320.1	NT	Mus musculus fragile-X-related protein 1 (Fxr1h) gene, exons 13a through 15
1790	11688	21564	2.3	1.0E-117	M19816.1	NT	Homo sapiens lymphocyte activation-associated protein mRNA, complete cds
2164	12051	21952	2.99	1.0E-117	AW957699.1	EST_HUMAN	Human apolipoprotein B-100 (apoB) gene, exon 10
3230	13154	22953	1.75	1.0E-117	AA978114.1	EST_HUMAN	EST369769 IMAGE resequences, IMAGE Homo sapiens cDNA
3908	13818	23599	3.62	1.0E-117	AA316723.1	EST_HUMAN	op32c11.s1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1578548 3'
4247	14146	23920	1.86	1.0E-117	8659564	NT	EST188414 HCC cell line (metastasis to liver in mouse) II Homo sapiens cDNA 5' end similar to ribosomal protein L29
4475	14369	24158	1.88	1.0E-117	AL042120.1	EST_HUMAN	Homo sapiens collagen, type IV, alpha 5 (Alport syndrome) (COL4A5), mRNA
4622	14510	24239	1.35	1.0E-117	X89670.1	NT	DKFZp434C1120_r1 434 (synonym: hles3) Homo sapiens cDNA clone DKFZp434C1120 5'
4622	14510	24300	1.35	1.0E-117	X89670.1	NT	H. sapiens mRNA for TFCR16 protein
4705	14591	24382	9.22	1.0E-117	AF134304.2	NT	H. sapiens mRNA for TFCR16 protein
4705	14591	24382	9.22	1.0E-117	AF134304.2	NT	Homo sapiens Scar2 (SCAR2) gene, partial cds
4856	14736	24516	3.36	1.0E-117	AB020673.1	NT	Homo sapiens Scar2 (SCAR2) gene, partial cds
5280	15202	24978	2.5	1.0E-117	BE730508.1	EST_HUMAN	Homo sapiens mRNA for KIAA0866 protein, complete cds
6404	16265	26426	4.99	1.0E-117	L76571.1	NT	601562657F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3832214 5'
6404	16265	26427	4.99	1.0E-117	L76571.1	NT	Homo sapiens nuclear hormone receptor (shp) gene, 3' end of cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6455	16316	26482	3.77	1.0E-117	AV717788.1	EST_HUMAN	AV717788 DCB Homo sapiens cDNA clone DCBBAE01 5'
6455	16316	26483	3.77	1.0E-117	AV717788.1	EST_HUMAN	AV717788 DCB Homo sapiens cDNA clone DCBBAE01 5'
6651	16531	26725	5.93	1.0E-117	AI950145.1	EST_HUMAN	wp86607.x1 NCL_CGAP_Brn25 Homo sapiens cDNA clone IMAGE:2468629 3' similar to TR:O75065
6837	16716	26908	1.7	1.0E-117	10834989	NT	O75065 KIAA0477 PROTEIN. ;
6837	16716	26909	1.7	1.0E-117	10834989	NT	Homo sapiens neural cell adhesion molecule 1 (NCAM1), mRNA
7361	17228	27428	2.28	1.0E-117	D16524.1	NT	Homo sapiens neural cell adhesion molecule 1 (NCAM1), mRNA
7635	17486	27706	1.51	1.0E-117	BE733922.1	EST_HUMAN	Human gene for very low density lipoprotein receptor, exon 11
8385	18262	28512	10.31	1.0E-117	W80605.1	EST_HUMAN	601599317F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3843748 5'
8595	18462	28732	3.96	1.0E-117	AB011541.1	NT	z883b11.1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:347229 5' similar to
8595	18462	28733	3.96	1.0E-117	AB011541.1	NT	gb:MI4219 BONE PROTEOGLYCAN II PRECURSOR (HUMAN);
8598	18516	28974	15.63	1.0E-117	BE269856.1	EST_HUMAN	Homo sapiens mRNA for MEGF8, partial cds
8872	18684	28974	2.22	1.0E-117	4501848	NT	Homo sapiens mRNA for MEGF8, partial cds
8872	18684	28975	2.22	1.0E-117	4501848	NT	Homo sapiens mRNA for MEGF8, partial cds
64	10050	19863	9.54	1.0E-118	AF161500.1	EST_HUMAN	601186203F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3544286 5'
90	10074	19890	2.59	1.0E-118	AL048854.1	EST_HUMAN	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 3 (ABCA3), mRNA
506	10448	20261	5.09	1.0E-118	7657016	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 3 (ABCA3), mRNA
896	12680	20667	0.98	1.0E-118	5174680	NT	Homo sapiens hypothetical protein (DJ328E19.C1.1), mRNA
2186	12073	21975	2.39	1.0E-118	BE389705.1	EST_HUMAN	Homo sapiens sine oculis homeobox (Drosophila) homolog 1 (SIX1) mRNA
2186	12073	21976	2.39	1.0E-118	BE389705.1	EST_HUMAN	601281947F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3604019 5'
2186	12073	21977	2.39	1.0E-118	BE389705.1	EST_HUMAN	601281947F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3604019 5'
2281	12165		3.77	1.0E-118	AW951729.1	EST_HUMAN	601281947F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3604019 5'
2711	12574	22465	2.38	1.0E-118	U07000.1	NT	EST363799 IMAGE resequences, MAGS Homo sapiens cDNA
2711	12574	22466	2.38	1.0E-118	U07000.1	NT	Human breakpoint cluster region (BCR) gene, complete cds
3066	12993		3.73	1.0E-118	Y13932.1	NT	Human breakpoint cluster region (BCR) gene, complete cds
3159	13084	22887	4.51	1.0E-118	A1347594.1	EST_HUMAN	Homo sapiens PRKY exon 7
3159	13084	22888	4.51	1.0E-118	A1347594.1	EST_HUMAN	qp01105.x1 NCL_CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1916769 3'
3998	13904	23679	7.67	1.0E-118	D23660.1	NT	qp01105.x1 NCL_CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1916769 3'
5329	15249	25053	2.02	1.0E-118	AF142624.1	NT	Human mRNA for ribosomal protein, complete cds
5329	15249	25054	2.02	1.0E-118	AF142624.1	NT	Homo sapiens calcium channel gamma 4 subunit (CACNG4) gene, exon 3
5620	15535	25620	1.88	1.0E-118	11420764	NT	Homo sapiens calcium channel gamma 4 subunit (CACNG4) gene, exon 3
6020	15924	26054	1.87	1.0E-118	4557732	NT	Homo sapiens transient receptor potential channel 5 (TRPC5), mRNA
6020	15924	26055	1.87	1.0E-118	4557732	NT	Homo sapiens latent transforming growth factor beta binding protein 2 (LTBP2) mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6482	16341	26509	4.13	1.0E-118	11431050	NT	Homo sapiens chromosome 2 open reading frame 3 (C2ORF3), mRNA
6648	16528	26722	2.23	1.0E-118	BE781223.1	EST_HUMAN	G01469159F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3872247 5'
6884	16763	26960	7.81	1.0E-118	BE062855.1	EST_HUMAN	QV0-BT0263-090200-097-h03 BT0263 Homo sapiens cDNA
6884	16763	26961	7.81	1.0E-118	BE062855.1	EST_HUMAN	QV0-BT0263-090200-097-h03 BT0263 Homo sapiens cDNA
6888	16767	26963	1.34	1.0E-118	AA443024.1	EST_HUMAN	z88d07.r1 Soares_NHIMPu_S1 Homo sapiens cDNA clone IMAGE:811789 5'
6888	16767	26964	1.34	1.0E-118	AA443024.1	EST_HUMAN	z88d07.r1 Soares_NHIMPu_S1 Homo sapiens cDNA clone IMAGE:811789 5'
7035	16912	27100	1.16	1.0E-118	AB002381.1	NT	Human mRNA for KIAA0383 gene, partial cds
7035	16912	27101	1.16	1.0E-118	AB002381.1	NT	Human mRNA for KIAA0383 gene, partial cds
7062	16939	27129	1.28	1.0E-118	4557732	NT	Homo sapiens latent transforming growth factor beta binding protein 2 (LTBP2) mRNA
7062	16939	27130	1.28	1.0E-118	4557732	NT	Homo sapiens latent transforming growth factor beta binding protein 2 (LTBP2) mRNA
7223	17100	27288	5.71	1.0E-118	BE263134.1	EST_HUMAN	G01144863F2 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3160502 5'
7936	17786	28027	1.18	1.0E-118	BF195407.1	EST_HUMAN	7n17e09.x1 NCL_CGAP_Brn23 Homo sapiens cDNA clone IMAGE:3564785 3' similar to SW:ZP3A_HUMAN P21754 ZONA PELLUCIDA SPERM-BINDING PROTEIN 3A PRECURSOR;
8598	18465	28737	3.06	1.0E-118	AA315007.1	EST_HUMAN	EST186814 HCC cell line (metastasis to liver in mouse) II Homo sapiens cDNA 5' end similar to dynein, light chain 1, cytoplasmic
8847	18659	28947	1.75	1.0E-118	BF093687.1	EST_HUMAN	QV0-JM0091-120900-385-b12 UM0091 Homo sapiens cDNA
8847	18659	28948	1.76	1.0E-118	BF093687.1	EST_HUMAN	QV0-JM0091-120900-385-b12 UM0091 Homo sapiens cDNA
741	10672	20508	0.81	1.0E-119	AF170492.1	NT	Homo sapiens chloride channel CLC4 (CLC4) mRNA, complete cds
1021	12683	20781	1.55	1.0E-119	7705607	NT	Homo sapiens CGI-105 protein (LOC51011), mRNA
1891	11786	21663	2.09	1.0E-119	AB023147.1	NT	Homo sapiens mRNA for KIAA0930 protein, partial cds
3064	12991	22783	1.81	1.0E-119	8922205	NT	Homo sapiens hypothetical protein FLJ10052 (FLJ10052), mRNA
3202	13126					EST_HUMAN	cn70b05.s1 NCL_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1556241 3' similar to WP:EO4F6.2 CE01214;
3870	13781	23573	1.15	1.0E-119	AA916760.1	EST_HUMAN	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
5111	14979	24753	0.95	1.0E-119	AA077394.1	EST_HUMAN	7B14F03 Chromosome 7 Fetal Brain cDNA Library Homo sapiens cDNA clone 7B14F03
5272	15194	24969	2.45	1.0E-119	AU133399.1	EST_HUMAN	AU133399 NT2RP4 Homo sapiens cDNA clone NT2RP4001991 5'
5282	15204	24980	14.93	1.0E-119	M89914.1	NT	Human neurofibromin (NF1) gene, complete cds
5285	15207	24984	3.32	1.0E-119	BE936121.1	EST_HUMAN	RC1-NN0073-250800-018-g06 NN0073 Homo sapiens cDNA
5336	15256	25079	2.24	1.0E-119	AV693731.1	EST_HUMAN	AV693731 GKC Homo sapiens cDNA clone GKCDHB03 5'
5726	15633	25736	7.19	1.0E-119	AI150703.1	EST_HUMAN	qb77c08.x1 Soares_fetal_heart_NbH19W Homo sapiens cDNA clone IMAGE:1706128 3' similar to SW:K1CJ_MOUSE P02535 KERATIN, TYPE I CYTOSKELETAL 10;
5887	15793	25914	2.79	1.0E-119	X06292.1	NT	Human c-fos/fos proto-oncogene
5895	15801	25925	4.26	1.0E-119	AW974193.1	EST_HUMAN	EST386296 IMAGE resequences, MAGM Homo sapiens cDNA
6381	16243	26403	1.42	1.0E-119	BE796614.1	EST_HUMAN	G0159200F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3946081 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7883	17733	27977	1.48	1.0E-119	AA465124.1	EST_HUMAN	aa3205.r1 NCI_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:814977 5'
7998	17848	28089	1.42	1.0E-119	AJ297701.1	NT	Homo sapiens partial IL-12RB1 gene for IL-12 receptor beta1 chain, exons 16-17
8535	18407		9.72	1.0E-119	BF569571.1	EST_HUMAN	602186072F1 NIH_MGC_45 Homo sapiens cDNA clone IMAGE:4310633 5'
9348	19671		1.37	1.0E-119	AW847519.1	EST_HUMAN	RC3-C10212-240999-011-f03 CT0212 Homo sapiens cDNA
237	10205	20022	1.4	1.0E-120	AB018301.1	NT	Homo sapiens mRNA for KIAA0758 protein, partial cds
298	10262	20082	1.34	1.0E-120	4507394	NT	Homo sapiens synaptotagmin 1 (SYNJ1), mRNA
1025	10943	20787	1.67	1.0E-120	AF248540.1	NT	Homo sapiens intersecin 2 (SH3D1B) mRNA, complete cds
1025	10943	20788	1.67	1.0E-120	AF248540.1	NT	Homo sapiens intersecin 2 (SH3D1B) mRNA, complete cds
1406	11311	21172	4.53	1.0E-120	N44873.1	EST_HUMAN	y40g12.r1 Soares melanocyte 2NblHM Homo sapiens cDNA clone IMAGE:273766 5'
1583	11487	21348	3.87	1.0E-120	AF167706.1	NT	Homo sapiens cysteine-rich repeat-containing protein S52 precursor, mRNA, complete cds
2060	11950	21847	0.9	1.0E-120	AB011399.1	NT	Homo sapiens gene for AF-6, complete cds
2060	11950	21848	0.9	1.0E-120	AB011399.1	NT	Homo sapiens gene for AF-6, complete cds
2482	12358	22250	0.84	1.0E-120	4755124	NT	Homo sapiens aquaporin 4 (AQP4), splice variant b, mRNA
3267	10262	20082	1.13	1.0E-120	4507334	NT	Homo sapiens synaptotagmin 1 (SYNJ1), mRNA
4260	14159	23936	1.17	1.0E-120	AF056490.1	NT	Homo sapiens cAMP-specific phosphodiesterase 8A (PDE8A) mRNA, partial cds
4260	14159	23937	1.17	1.0E-120	AF056490.1	NT	Homo sapiens cAMP-specific phosphodiesterase 8A (PDE8A) mRNA, partial cds
4563	14455	24242	2.79	1.0E-120	AF098463.1	NT	Homo sapiens stannocalcin (STC) gene, partial cds
4563	14455	24243	2.79	1.0E-120	AF098463.1	NT	Homo sapiens stannocalcin (STC) gene, partial cds
5168	15034	24801	0.89	1.0E-120	A190903.1	EST_HUMAN	cd81f03.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1733981 3'
5508	15426	25488	13.84	1.0E-120	BF568222.1	EST_HUMAN	602183994F1 NIH_MGC_42 Homo sapiens cDNA clone IMAGE:4300174 5'
5508	15426	25489	13.84	1.0E-120	BF568222.1	EST_HUMAN	602183994F1 NIH_MGC_42 Homo sapiens cDNA clone IMAGE:4300174 5'
6469	16328	26495	1.49	1.0E-120	D34619.1	NT	Human TBXAS1 gene for thromboxane synthase, exon 7
6608	16488	26674	1.67	1.0E-120	Y00067.1	NT	Human gene for neurofilament subunit M (NF-M)
6608	16488	26675	1.67	1.0E-120	Y00067.1	NT	Human gene for neurofilament subunit M (NF-M)
6850	16729	26924	2.44	1.0E-120	BF337599.1	EST_HUMAN	G02035352F1 NCI_CGAP_Bm64 Homo sapiens cDNA clone IMAGE:4183333 5'
6898	16777	26971	2.43	1.0E-120	AB007984.1	NT	Homo sapiens mRNA, chromosome 1 specific transcript KIAA0496
6898	16777	26972	2.43	1.0E-120	AB007984.1	NT	Homo sapiens mRNA, chromosome 1 specific transcript KIAA0496
6922	16800	26993	1.33	1.0E-120	AB007934.1	NT	Homo sapiens mRNA for KIAA0465 protein, partial cds
7470	17330	27535	4.54	1.0E-120	BE392102.1	EST_HUMAN	601307739F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3625544 5'
7470	17330	27536	4.54	1.0E-120	BE392102.1	EST_HUMAN	601307739F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3625544 5'
7617	17468	27687	4.72	1.0E-120	BF306541.1	EST_HUMAN	601888956F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4122876 5'
7626	17477	27698	7.31	1.0E-120	AU133205.1	EST_HUMAN	AU133205 NT2RP4 Homo sapiens cDNA clone NT2RP4001541 5'
7798	17648	27985	2.53	1.0E-120	AB029000.1	NT	Homo sapiens mRNA for KIAA1077 protein, partial cds
8469	18342	28607	6.4	1.0E-120	BE296387.1	EST_HUMAN	601176727F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3532015 5'

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8914	18722	29013	2.07	1.0E-120	U94774.1	NT	Human muscle glycogen phosphorylase (PYGM) gene, 5'UTR and exon 1
9495	19111	25288	1.36	1.0E-120	11417862	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
67	10052	19867	1.04	1.0E-121	Y18000.1	NT	Homo sapiens NF2 gene
374	10328	20151	0.98	1.0E-121	AU134968.1	EST_HUMAN	AU134963 PLACE1 Homo sapiens cDNA clone PLACE1000899 5'
707	12674	20465	1.23	1.0E-121	5032192	NT	Homo sapiens TNF receptor-associated factor 1 (TRAF1) mRNA
1556	11461	21319	0.99	1.0E-121	AB011153.1	NT	Homo sapiens mRNA for KIAA0581 protein, partial cds
1923	11818	21697	0.89	1.0E-121	4755139	NT	Homo sapiens inositol polyphosphate-4-phosphatase, type I, 107KD (INPP4A), splice variant a, mRNA
1923	11818	21698	0.89	1.0E-121	4755139	NT	Homo sapiens inositol polyphosphate-4-phosphatase, type I, 107KD (INPP4A), splice variant a, mRNA
2055	11945	21841	1.17	1.0E-121	L76631.1	NT	Homo sapiens metabotropic glutamate receptor 1 beta (mGluR1beta) mRNA, complete cds
2530	12404	22295	1.05	1.0E-121	BF344378.1	EST_HUMAN	602014759F1 NCI_CGAP_Bn64 Homo sapiens cDNA clone IMAGE:4150286 5'
2530	12404	22296	1.05	1.0E-121	BF344378.1	EST_HUMAN	602014759F1 NCI_CGAP_Bn64 Homo sapiens cDNA clone IMAGE:4150286 5'
3042	12969	22763	3.09	1.0E-121	Y19208.1	NT	Homo sapiens h1b3 gene for hair keratin, exons 1 to 9
3042	12969	22764	3.09	1.0E-121	Y19208.1	NT	Homo sapiens h1b3 gene for hair keratin, exons 1 to 9
3492	13408	23213	1.09	1.0E-121	AB037758.1	NT	Homo sapiens mRNA for KIAA1337 protein, partial cds
3492	13408	23214	1.09	1.0E-121	AB037758.1	NT	Homo sapiens mRNA for KIAA1337 protein, partial cds
3624	13538	23325	6.61	1.0E-121	AF155155.2	NT	Homo sapiens adaptor-related protein complex AP-4 epsilon subunit mRNA, complete cds
4236	14134	23910	1.21	1.0E-121	AI263294.1	EST_HUMAN	qx57b01.x1 NCI_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2005417 3'
4901	14781	24566	2.55	1.0E-121	X91937.1	NT	H. sapiens ECE-1 gene (exon 17)
5050	14922	24695	1.03	1.0E-121	AI904151.1	EST_HUMAN	CM-BT043-090299-075 BT043 Homo sapiens cDNA
6632	16512	26701	2.58	1.0E-121	D84122.1	NT	Homo sapiens DNA for prostacyclin synthase, exon 8
6632	16512	26702	2.58	1.0E-121	D84122.1	NT	Homo sapiens DNA for prostacyclin synthase, exon 8
8157	18045	28297	4.44	1.0E-121	11427788	NT	Homo sapiens COX11 (yeast) homolog, cytochrome c oxidase assembly protein (COX11), mRNA
8163	18051	28303	2.28	1.0E-121	AF064200.1	NT	Homo sapiens UDP-glucuronosyltransferase 2B4 precursor (UGT2B4) mRNA, UGT2B4*E458 allele, complete cds
8336	18213	28486	4.91	1.0E-121	7330334	NT	Homo sapiens chloride intracellular channel 4 like (CLIC4L), mRNA
8363	18240	28489	3.48	1.0E-121	N59624.1	EST_HUMAN	wf4c01.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:248448 3'
267	10232	20047	3.99	1.0E-122	11526176	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1), mRNA
333	10292	20107	2.22	1.0E-122	AF114488.1	NT	Homo sapiens intersectin short isoform (ITSN) mRNA, complete cds
355	10312	20192	1.54	1.0E-122	11526176	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1), mRNA
864	10790	20641	2.85	1.0E-122	AF114488.1	NT	Homo sapiens intersectin short isoform (ITSN) mRNA, complete cds
1201	11111	20957	3.41	1.0E-122	M20707.1	NT	Human kappa-immunoglobulin germline pseudogene (Chr22.4) variable region (subgroup V kappa II)

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1667	11569	21435	1.32	1.0E-122	AF167706.1	NT	Homo sapiens cysteine-rich repeat-containing protein S62 precursor, mRNA, complete cds
1684	11566	21458	2.01	1.0E-122	11418424	NT	Homo sapiens collagen, type XII, alpha 1 (COL12A1), mRNA
1684	11586	21459	2.01	1.0E-122	11418424	NT	Homo sapiens collagen, type XII, alpha 1 (COL12A1), mRNA
1772	11671	21549	5.91	1.0E-122	BE906024.1	EST_HUMAN	601497032F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3899358 5'
2441	12318	22215	10.56	1.0E-122	BF316170.1	EST_HUMAN	601896173F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4125234 5'
2441	12318	22216	10.56	1.0E-122	BF316170.1	EST_HUMAN	601896173F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4125234 5'
4738	14623	24409	1.82	1.0E-122	4502166	NT	Homo sapiens amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease) (APP), mRNA
4918	14797		1.2	1.0E-122	AW504645.1	EST_HUMAN	U14HF-BND-all-a-03-0-U1.1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3079948 5'
6051	15337	25390	6.41	1.0E-122	BE266039.1	EST_HUMAN	601113567F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3354232 5'
7219	17096	27286	1.35	1.0E-122	11424216	NT	Homo sapiens lethal giant larvae (Drosophila) homolog 2 (LLGL2), mRNA
9098	18869		4.35	1.0E-122	11418187	NT	Homo sapiens phosphomannomutase 1 (PMM1), mRNA
181	10153	19968	1.07	1.0E-123	U31519.1	NT	Human phosphoenolpyruvate carboxykinase (PCK1) gene, promoter region and partial cds
751	10681	20517	1.72	1.0E-123	BF345274.1	EST_HUMAN	602018038F1 NCI_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4153670 5'
751	10681	20518	1.72	1.0E-123	BF345274.1	EST_HUMAN	602018038F1 NCI_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4153670 5'
996	10916	20760	3.79	1.0E-123	AL163249.2	NT	Homo sapiens chromosome 21 segment HS21C049
1005	10923	20767	5.06	1.0E-123	5803114	NT	Homo sapiens inner membrane protein, mitochondrial (mitofilin) (IMMT), mRNA
1218	11126	20976	3.35	1.0E-123	4505818	NT	Homo sapiens phosphatidylinositol-4-phosphate 5-kinase, type II, beta (PIP5K2B) mRNA, and translated products
1218	11126	20977	3.35	1.0E-123	4505818	NT	Homo sapiens phosphatidylinositol-4-phosphate 5-kinase, type II, beta (PIP5K2B) mRNA, and translated products
1439	11344	21211	1.76	1.0E-123	AJ388641.1	NT	Homo sapiens partial mRNA for immunoglobulin kappa chain variable region (IGVK gene), sample GN02
2052	11942	21837	2.98	1.0E-123	M55419.1	NT	Human amelogenin (AMELY) gene, 3' end of cds
2052	11942	21838	2.98	1.0E-123	M55419.1	NT	Human amelogenin (AMELY) gene, 3' end of cds
2052	11942	21839	2.98	1.0E-123	M55419.1	NT	Human amelogenin (AMELY) gene, 3' end of cds
2267	12151		4.5	1.0E-123	7705962	NT	Homo sapiens RAB9-like protein (LOC51209), mRNA
5344	15265	25091	1.75	1.0E-123	L34219.1	NT	Homo sapiens retinaldehyde-binding protein (CRALBP) gene, complete cds
5344	15265	25092	1.75	1.0E-123	L34219.1	NT	Homo sapiens retinaldehyde-binding protein (CRALBP) gene, complete cds
5425	15346	25400	1.29	1.0E-123	BE799746.1	EST_HUMAN	601591108F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3945433 5'
5893	15799	25923	2.27	1.0E-123	AU118435.1	EST_HUMAN	AU118435 HEMBA1 Homo sapiens cDNA clone HEMBA1003591 5'
6186	16071	26221	1.3	1.0E-123	U42224.1	NT	Human growth hormone releasing hormone gene, exon 7
6509	16368	26545	1.95	1.0E-123	BE263001.1	EST_HUMAN	601152815F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3509162 5'
7392	17310	27517	4.14	1.0E-123	AB007923.1	NT	Homo sapiens mRNA for KIAA0454 protein, partial cds

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7471	17331	27537	12.23	1.0E-123	U09823.1	NT	Oryctolagus cuniculus New Zealand white elongation factor 1 alpha (Rabefla2) mRNA, complete cds
8958	18765	23057	5	1.0E-123	BF677292.1	EST_HUMAN	602086791F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4250879 5'
8958	18765	23058	5	1.0E-123	BF677292.1	EST_HUMAN	602086791F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4250879 5'
268	10233	20048	1.1	1.0E-124	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
268	10233	20049	1.1	1.0E-124	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
273	10239		1.98	1.0E-124	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
477	10421	20238	2.11	1.0E-124	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
676	10609	20429	2.03	1.0E-124	AA397551.1	EST_HUMAN	z181b04.r1 Stratagene schizo brain S11 Homo sapiens cDNA clone IMAGE:728719 5' similar to TR:G300482 G300482 POL=REVERSE TRANSCRIPTASE HOMOLOG (RETROVIRAL ELEMENT);
676	10609	20430	2.03	1.0E-124	AA397551.1	EST_HUMAN	z181b04.r1 Stratagene schizo brain S11 Homo sapiens cDNA clone IMAGE:728719 5' similar to TR:G300482 G300482 POL=REVERSE TRANSCRIPTASE HOMOLOG (RETROVIRAL ELEMENT);
742	10673	20509	3.67	1.0E-124	AF155654.1	NT	Human putative ribosomal protein S1 mRNA
791	10720	20561	1.06	1.0E-124	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
886	10812	20660	1.81	1.0E-124	7705446	NT	Homo sapiens hypothetical protein (HSPC088), mRNA
1293	11200	21056	2.59	1.0E-124	11419092	NT	Homo sapiens ring finger protein (RNF), mRNA
1324	11231	21086	5.54	1.0E-124	AF274892.1	NT	Homo sapiens glucose transporter 3 gene, exons 9, 10, and complete cds
1324	11231	21087	5.54	1.0E-124	AF274892.1	NT	Homo sapiens glucose transporter 3 gene, exons 9, 10, and complete cds
1773	11672	21550	2.35	1.0E-124	AJ131712.1	NT	Homo sapiens mRNA for nucleolar RNA-helicase (noH61 gene)
2016	11907	21797	2.23	1.0E-124	BE879824.1	EST_HUMAN	601491715F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3863954 5'
2408	12285	22182	0.85	1.0E-124	AB024069.1	NT	Homo sapiens gene for B120, exon 11
3319	13240	23045	0.85	1.0E-124	4504116	NT	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
3446	13363	23169	0.96	1.0E-124	S78634.1	NT	Homo sapiens ATP-sensitive inwardly rectifying K-channel subunit (KCNJ6/BIR1) gene, exon
3446	13363	23170	0.96	1.0E-124	S78634.1	NT	Homo sapiens ATP-sensitive inwardly rectifying K-channel subunit (KCNJ6/BIR1) gene, exon
3598	13512	23300	2.95	1.0E-124	X13794.1	NT	H. sapiens lactate dehydrogenase B gene exon 1 and 2 (EC 1.1.1.27) (and joined CDS)
3825	13737	23528	1.09	1.0E-124	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
3983	13890	23666	1.19	1.0E-124	4504116	NT	Homo sapiens glutamate receptor, ionotropic, kainate 1 (GRIK1) mRNA
4639	14527	24315	1.58	1.0E-124	AB024069.1	NT	Homo sapiens gene for B120, exon 11
4850	14731		1.12	1.0E-124	M18178.1	NT	Human fibronectin gene extra type III repeat (EDII), exon x+1
5039	14911	24585	2.72	1.0E-124	A1204535.1	EST_HUMAN	q156h03.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1754089 3'
5240	15164	24934	8.97	1.0E-124	8922337	NT	Homo sapiens hypothetical protein FLJ10300 (FLJ10300), mRNA
5590	15505	25580	6.43	1.0E-124	BF696135.1	EST_HUMAN	602124644F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4281635 5'
6185	16070	26220	3.31	1.0E-124	Y11717.1	NT	M. musculus mRNA for hoxa3 gene
6805	16684	26874	5.66	1.0E-124	4506654	NT	Homo sapiens ribosomal protein L5 (RPL5) mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6930	16808	27002	1.35	1.0E-124	AW612106.1	EST_HUMAN	hg94a09.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2953240 3' similar to TR:O95162 O95162 PEROXISOMAL SHORT-CHAIN ALCOHOL DEHYDROGENASE.;
6930	16808	27003	1.35	1.0E-124	AW612106.1	EST_HUMAN	hg94a09.x1 NCL_CGAP_Kid11 Homo sapiens cDNA clone IMAGE:2953240 3' similar to TR:O95162
7466	17326	27532	2.44	1.0E-124	AV645633.1	EST_HUMAN	O95162 PEROXISOMAL SHORT-CHAIN ALCOHOL DEHYDROGENASE.;
7466	17326	27533	2.44	1.0E-124	AV645633.1	EST_HUMAN	AV645633 GLC Homo sapiens cDNA clone GLCACE04 3'
7542	17393	27604	7.8	1.0E-124	AI767133.1	EST_HUMAN	AV645633 GLC Homo sapiens cDNA clone GLCACE04 3'
7542	17393	27605	7.8	1.0E-124	AI767133.1	EST_HUMAN	wi93f02.x1 NCL_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2400891 3'
7576	17526	27752	1.25	1.0E-124	AW503755.1	EST_HUMAN	wi93f02.x1 NCL_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2400891 3'
8404	18280	28532	2.25	1.0E-124	U94776.1	NT	UIHF-BN0-akz-b-04-0-UIr1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3078846 5'
8645	18509	28788	2.25	1.0E-124	AW665663.1	EST_HUMAN	Human muscle glycogen phosphorylase (PYGM) gene, exons 6 through 17
8767	17916	28162	1.87	1.0E-124	AI446455.1	EST_HUMAN	h05c06.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2980906 3'
8767	17916	28163	1.87	1.0E-124	AI446455.1	EST_HUMAN	t19e03.x1 NCL_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2141980 3' similar to TR:O31662 O31662 YKRS PROTEIN.;
9173	10609	20429	3.98	1.0E-124	AA397551.1	EST_HUMAN	t19e03.x1 NCL_CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2141980 3' similar to TR:O31662 O31662 YKRS PROTEIN.;
9173	10609	20430	3.98	1.0E-124	AA397551.1	EST_HUMAN	z181b04.r1 Stratiogene schizo brain S11 Homo sapiens cDNA clone IMAGE:728719 5' similar to TR:G300482 G300482 POL=REVERSE TRANSCRIPTASE HOMOLOG (RETROVIRAL ELEMENT);
9846	19626	25005	1.99	1.0E-124	11417862	NT	z181b04.r1 Stratiogene schizo brain S11 Homo sapiens cDNA clone IMAGE:728719 5' similar to TR:G300482 G300482 POL=REVERSE TRANSCRIPTASE HOMOLOG (RETROVIRAL ELEMENT);
9846	19626	25006	1.99	1.0E-124	11417862	NT	z181b04.r1 Stratiogene schizo brain S11 Homo sapiens cDNA clone IMAGE:728719 5' similar to TR:G300482 G300482 POL=REVERSE TRANSCRIPTASE HOMOLOG (RETROVIRAL ELEMENT);
316	10278		5.41	1.0E-125	AB032998.1	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
420	9987	19778	3.92	1.0E-125	BE743922.1	EST_HUMAN	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
628	10565	20377	1.63	1.0E-125	AI110656.1	EST_HUMAN	Homo sapiens mRNA for KIAA1172 protein, partial cds
628	10565	20378	1.63	1.0E-125	AI110656.1	EST_HUMAN	60157798.F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3926685 5'
711	10643	20469	1.24	1.0E-125	AF264750.1	NT	HA0086 Human fetal liver cDNA library Homo sapiens cDNA
842	10769	20619	2.13	1.0E-125	AA042813.1	EST_HUMAN	HA0086 Human fetal liver cDNA library Homo sapiens cDNA
982	10905	20750	1.53	1.0E-125	AL163210.2	NT	Homo sapiens ALR-like protein mRNA, partial cds
1136	11050	20890	1.63	1.0E-125	7662279	NT	z183c07.s1 Soares_pregnant_uterus_NbHPU Homo sapiens cDNA clone IMAGE:486540 3' similar to gb:X65857_cds1 OLFACTORY RECEPTOR-LIKE PROTEIN HGMP07E (HUMAN);
1649	12700	21414	1.08	1.0E-125	7661607	NT	Homo sapiens chromosome 21 segment HS21C010
1769	11688	21545	3.81	1.0E-125	AF015450.1	NT	Homo sapiens KIAA0744 gene product; histone deacetylase 7 (KIAA0744), mRNA
1769	11688	21546	3.81	1.0E-125	AF015450.1	NT	Homo sapiens KIAA0022 gene product (KIAA0022), mRNA
1769	11688	21546	3.81	1.0E-125	AF015450.1	NT	Homo sapiens Usurpin-alpha mRNA, complete cds
1769	11688	21546	3.81	1.0E-125	AF015450.1	NT	Homo sapiens Usurpin-alpha mRNA, complete cds

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2455	12332	22228	1.15	1.0E-125	AA042813.1	EST_HUMAN	z163c07.s1 Soares_pregnant_uterus_NbhPU Homo sapiens cDNA clone IMAGE:486540 3' similar to gb:X65857_cds1 OLFATORY RECEPTOR-LIKE PROTEIN HGMP07E (HUMAN);
2551	12424	22315	1.65	1.0E-125	4504696	NT	Homo sapiens inhibin, alpha (INH4) mRNA
2551	12424	22316	1.65	1.0E-125	4504696	NT	Homo sapiens inhibin, alpha (INH4) mRNA
2555	12427	22320	2.45	1.0E-125	AI732966.1	EST_HUMAN	oh164d02.x5 NCL CGAP_K1d5 Homo sapiens cDNA clone IMAGE:1471779 3'
4450	14344	24136	1.98	1.0E-125	11425114	NT	Homo sapiens zinc finger protein ZNF287 (ZNF287), mRNA
4450	14344	24137	1.98	1.0E-125	11425114	NT	Homo sapiens zinc finger protein ZNF287 (ZNF287), mRNA
4516	14409	24195	0.84	1.0E-125	BE315412.1	EST_HUMAN	601141152F1 NIH_MGC 9 Homo sapiens cDNA clone IMAGE:3140798 5'
5581	15495	25573	1.41	1.0E-125	11436448	NT	Homo sapiens KIAA0985 protein (KIAA0985), mRNA
5612	15527	25510	3.44	1.0E-125	BE892660.1	EST_HUMAN	601433472F1 NIH_MGC 72 Homo sapiens cDNA clone IMAGE:3918952 5'
5955	15870	25993	1.48	1.0E-125	BE562526.1	EST_HUMAN	601335826F1 NIH_MGC 44 Homo sapiens cDNA clone IMAGE:3689790 5'
5955	15870	25994	1.48	1.0E-125	BE562526.1	EST_HUMAN	601335826F1 NIH_MGC 44 Homo sapiens cDNA clone IMAGE:3689790 5'
6201	15961	26093	6.36	1.0E-125	X03427.1	NT	Homo sapiens [GF-II] gene, exon 5
6201	15961	26094	6.36	1.0E-125	X03427.1	NT	Homo sapiens [GF-II] gene, exon 5
6974	16851	27043	1.22	1.0E-125	U90288.1	NT	Human chromosome 10 duplicated adrenoleukodystrophy (ALD) gene segment containing exons 8-10
6974	16851	27044	1.22	1.0E-125	U90288.1	NT	Human chromosome 10 duplicated adrenoleukodystrophy (ALD) gene segment containing exons 8-10
7272	17149	27343	4.31	1.0E-125	BE161640.1	EST_HUMAN	QV1-HT0638-070500-191-d12 HT0638 Homo sapiens cDNA
7272	17149	27344	4.31	1.0E-125	BE161640.1	EST_HUMAN	QV1-HT0638-070500-191-d12 HT0638 Homo sapiens cDNA
8069	17960	28211	3.15	1.0E-125	AF043458.1	NT	Homo sapiens IREL gene, exon 5
8152	18040	28289	1.86	1.0E-125	AW131202.1	EST_HUMAN	xf59f02.x1 NCL CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2622363 3' similar to TR:Q13284 Q13284 LAMBDA/OTA PROTEIN KINASE C-INTERACTING PROTEIN. [1];
8152	18040	28290	1.86	1.0E-125	AW131202.1	EST_HUMAN	xf59f02.x1 NCL CGAP_Gas4 Homo sapiens cDNA clone IMAGE:2622363 3' similar to TR:Q13284 Q13284 LAMBDA/OTA PROTEIN KINASE C-INTERACTING PROTEIN. [1];
8478	18351	28516	5.13	1.0E-125	AB014567.1	NT	Homo sapiens mRNA for KIAA0667 protein, partial cds
8609	18476	28748	2.92	1.0E-125	7669505	NT	Homo sapiens myosin, heavy polypeptide 1, skeletal muscle, adult (MYH1), mRNA
8615	18482	28754	5.15	1.0E-125	AF026029.1	NT	Homo sapiens poly(A) binding protein II (PABP2) gene, complete cds
8704	18522	28804	2.49	1.0E-125	AW812893.1	EST_HUMAN	RC3-ST0186-250200-078-c11 ST0186 Homo sapiens cDNA
8793	18607	28896	4.36	1.0E-125	BE074267.1	EST_HUMAN	QV3-BT0569-020200-075-g09 BT0569 Homo sapiens cDNA
8793	18607	28897	4.36	1.0E-125	BE074267.1	EST_HUMAN	QV3-BT0569-020200-075-g09 BT0569 Homo sapiens cDNA
8941	18749	29044	1.96	1.0E-125	AB014567.1	NT	Homo sapiens mRNA for KIAA0667 protein, partial cds
757	10687	20525	0.88	1.0E-126	4758007	NT	Homo sapiens CDC-like kinase (CLK) mRNA
760	10690	20528	1.2	1.0E-126	M61936.1	NT	Human laminin B1 chain gene, exon 20

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
901	10826	20670	2.03	1.0E-126	X68735.1	NT	H.sapiens gene for alpha1-antichymotrypsin, exon 3
2552	12425	22317	2.24	1.0E-126	6382078	NT	Homo sapiens RAN binding protein 2 (RANBP2), mRNA
3035	12963	22757	6.07	1.0E-126	AA160709.1	EST_HUMAN	z072c03.r1 Stratagene pancreas (#937208) Homo sapiens cDNA clone IMAGE:592420 5'
3035	12963	22758	6.07	1.0E-126	AA160709.1	EST_HUMAN	z072c03.r1 Stratagene pancreas (#937208) Homo sapiens cDNA clone IMAGE:592420 5'
3577	13491	23281	1.21	1.0E-126	X53941.1	NT	H.sapiens DNA for liver cytochrome b5 pseudogene
3605	13519	23307	2.04	1.0E-126	7657038	NT	Homo sapiens death receptor 6 (DR6), mRNA
4677	14563	24356	0.96	1.0E-126	AF101108.1	NT	Homo sapiens collagen type XI alpha-1 (COL11A1) gene, exon 63
4677	14563	24357	0.96	1.0E-126	AF101108.1	NT	Homo sapiens collagen type XI alpha-1 (COL11A1) gene, exon 63
4728	14614	24400	1.57	1.0E-126	N34078.1	EST_HUMAN	yk78c06.r1 Soares melanocyte 2NbhM Homo sapiens cDNA clone IMAGE:267850 5'
5779	15686	25795	3.68	1.0E-126	AA460075.1	EST_HUMAN	z66e03.r1 Soares_total_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:796444 5' similar to TR:G1145880 G1145880 TITIN;
5797	15703	25813	3.82	1.0E-126	AB040958.1	NT	Homo sapiens mRNA for KIAA1525 protein, partial cds
5797	15703	25814	3.82	1.0E-126	AB040958.1	NT	Homo sapiens mRNA for KIAA1525 protein, partial cds
6660	16540	26737	2.77	1.0E-126	X16609.1	NT	Human mRNA for ankryrin (variant 2.1)
8233	18114	28366	1.95	1.0E-126	BF683175.1	EST_HUMAN	602139138F1 NIH_MGC_46 Homo sapiens cDNA clone IMAGE:4298240 5'
8806	18620	28910	2.41	1.0E-126	BE261660.1	EST_HUMAN	601149404F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3502129 5'
9635	15098	24890	4.38	1.0E-126	BE743922.1	EST_HUMAN	601577981F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3926685 5'
165	10138	19954	3.59	1.0E-127	AB024597.1	NT	Homo sapiens mRNA for casein kinase I epsilon, complete cds
165	10138	19955	3.59	1.0E-127	AB024597.1	NT	Homo sapiens mRNA for casein kinase I epsilon, complete cds
166	10138	19954	2.31	1.0E-127	AB024597.1	NT	Homo sapiens mRNA for casein kinase I epsilon, complete cds
166	10138	19955	2.31	1.0E-127	AB024597.1	NT	Homo sapiens mRNA for casein kinase I epsilon, complete cds
272	10238	20056	2.35	1.0E-127	D87675.1	NT	Homo sapiens mRNA for casein kinase I epsilon, complete cds
272	10238	20057	2.35	1.0E-127	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
863	10789	20640	1.32	1.0E-127	AF114488.1	NT	Homo sapiens intersecin short isoform (ITSN) mRNA, complete cds
898	10823	20669	1.28	1.0E-127	U72621.2	NT	Homo sapiens lost on transformation LOT1 mRNA, complete cds
1665	11567	21433	0.98	1.0E-127	4827053	NT	Homo sapiens ubiquitin specific protease 8 (USP8) mRNA
2020	11911	21800	1.59	1.0E-127	5803065	NT	Homo sapiens leukocyte immunoglobulin-like receptor, subfamily A (with TM domain), member 1 (LILRA1), mRNA
2020	11911	21801	1.59	1.0E-127	5803065	NT	Homo sapiens leukocyte immunoglobulin-like receptor, subfamily A (with TM domain), member 1 (LILRA1), mRNA
2153	12041	21939	7.45	1.0E-127	4506620	NT	Homo sapiens ribosomal protein L26 (RPL26) mRNA
2294	12176	22075	4.01	1.0E-127	AF245305.1	NT	Homo sapiens adicican mRNA, complete cds
2566	12437	22330	2.78	1.0E-127	X12881.1	NT	Human mRNA for cytokeraatin 18
2579	12450	22341	0.96	1.0E-127	AA450131.1	EST_HUMAN	z442a02.r1 Soares_total_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:789098 5'

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2579	12450	22342	0.96	1.0E-127	AA450131.1	EST_HUMAN	z42a02.r1 Soares_total_fetus_Nb2H-F8_9w Homo sapiens cDNA clone IMAGE:789098 5'
3740	13652	23435	0.88	1.0E-127	AW161297.1		au80e06.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2782594 5' similar to
4026	13929	23706	1.09	1.0E-127	AF135188.1	EST_HUMAN	TR:Q15170 Q15170 TRANSCRIPTION FACTOR S-II-RELATED PROTEIN ;contains element MER22
4128	14028	23802	0.86	1.0E-127	AL163247.2	NT	repetitive element ;
4160	14050	23833	21.46	1.0E-127	7706239	NT	Homo sapiens delayed rectifier potassium channel subunit 1sK mRNA, complete cds
4160	14060	23834	21.46	1.0E-127	7706239	NT	Homo sapiens chromosome 21 segment HS21C047
4395	14291	24075	0.92	1.0E-127	AF252297.1	NT	Homo sapiens neuroblastoma-amplified protein (LOC51594), mRNA
4499	14393	24178	4.16	1.0E-127	4506384	NT	Homo sapiens neuroblastoma-amplified protein (LOC51594), mRNA
4592	14425	24252	1.93	1.0E-127	AL163268.2	NT	Homo sapiens cytochrome P450 rethoid metabolizing protein P450RAI-2 mRNA, complete cds
4575	14496	24252	0.98	1.0E-127	6912639	NT	Homo sapiens RAD1 (S. pombe) homolog (RAD1) mRNA, and translated products
5546	15462	25533	3.72	1.0E-127	X85764.1	NT	Homo sapiens chromosome 21 segment HS21C068
5742	15660	25757	2.67	1.0E-127	X84060.1	NT	Homo sapiens Ring1 and YY1 binding protein (RYBP), mRNA
5816	15722	25835	6.76	1.0E-127	4504778	NT	H. sapiens NOS2 gene, exon 6
6578	16436	26620	1.38	1.0E-127	11421914	NT	H. sapiens TCF11 gene, exon 3-6
6578	16436	26621	1.38	1.0E-127	11421914	NT	Homo sapiens Integrin, beta 8 (ITGB8) mRNA
7558	17409	27624	4.97	1.0E-127	AF274863.1	NT	Homo sapiens Pendred syndrome (PDS), mRNA
7558	17409	27625	4.97	1.0E-127	AF274863.1	NT	Homo sapiens secretory pathway component Sec31B-1 mRNA, alternatively spliced, complete cds
7923	17773	28012	1.17	1.0E-127	11427235	NT	Homo sapiens secretory pathway component Sec31B-1 mRNA, alternatively spliced, complete cds
8498	18371	28634	6.74	1.0E-127	11417339	NT	Homo sapiens Chediak-Higashi syndrome 1 (GHS1), mRNA
8498	18371	28635	6.74	1.0E-127	11417339	NT	Homo sapiens similar to heat shock 70kD protein 9B (mortalin-2) (H. sapiens) (LOC63184), mRNA
8898	18707	29001	2.46	1.0E-127	BE895415.1	EST_HUMAN	Homo sapiens similar to heat shock 70kD protein 9B (mortalin-2) (H. sapiens) (LOC63184), mRNA
8898	18707	29002	2.46	1.0E-127	BE895415.1	EST_HUMAN	601434784F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3919917 5'
9397	10138	19954	1.66	1.0E-127	AB024597.1	NT	601434784F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3919917 5'
9397	10138	19955	1.66	1.0E-127	AB024597.1	NT	Homo sapiens mRNA for casein kinase I epsilon, complete cds
9595	19177	25276	2.1	1.0E-127	AB011399.1	NT	Homo sapiens mRNA for casein kinase I epsilon, complete cds
452	10396	20214	4.46	1.0E-128	BE385617.1	EST_HUMAN	Homo sapiens gene for AF-6, complete cds
1138	11052	20892	1.48	1.0E-128	4758081	NT	601278127F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3618822 5'
1138	11052	20893	1.48	1.0E-128	4758081	NT	Homo sapiens chondroitin sulfate proteoglycan 2 (versican) (GSPG2) mRNA
2025	11916	21805	12.19	1.0E-128	U02523.1	NT	Homo sapiens chondroitin sulfate proteoglycan 2 (versican) (GSPG2) mRNA
2025	11916	21806	12.19	1.0E-128	U02523.1	NT	Human FAU1P pseudogene, trinucleotide repeat regions
2025	11916	21806	12.19	1.0E-128	U02523.1	NT	Human FAU1P pseudogene, trinucleotide repeat regions

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2162	12049	21950	13.3	1.0E-128	4506718	NT	Homo sapiens ribosomal protein S2 (RPS2) mRNA
2395	12273		0.85	1.0E-128	11437455	NT	Homo sapiens chromatin-specific transcription elongation factor, 140 kDa subunit (FACTP140), mRNA
3348	13268	23071	1.13	1.0E-128	AB033073.1	NT	Homo sapiens mRNA for KIAA1247 protein, partial cds
4565	14457	24245	5.46	1.0E-128	11426673	NT	Homo sapiens prospero-related homeobox 1 (PROX1), mRNA
5865	15771	25890	2.87	1.0E-128	11420965	NT	Homo sapiens phosphodiesterase 1C, calmodulin-dependent (70kD) (PDE1C), mRNA
6140	15988	26123	7.23	1.0E-128	BF224345.1	EST_HUMAN	7486b10.x1 NCJ CGAP_Lu24 Homo sapiens cDNA clone IMAGE: 3'
6976	16853	27046	3.28	1.0E-128	AB007923.1	NT	Homo sapiens mRNA for KIAA0454 protein, partial cds
6976	16853	27047	3.28	1.0E-128	AB007923.1	NT	Homo sapiens mRNA for KIAA0454 protein, partial cds
7834	17684	27929	1.25	1.0E-128	AA639198.1	EST_HUMAN	ns04a1.1 NCJ CGAP_Ew1 Homo sapiens cDNA clone IMAGE:1182620 similar to TR:G951338 G951338
8092	17983	28232	5.94	1.0E-128	11425254	NT	CHROMOSOME SEGREGATION GENE HOMOLOG CAS. ;
8101	17991	28240	3.87	1.0E-128	AA926959.1	EST_HUMAN	Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2D (GRIN2D), mRNA
8230	18111	28364	1.79	1.0E-128	BE384475.1	EST_HUMAN	om88h08.s1 NCJ CGAP_GC4 Homo sapiens cDNA clone IMAGE:1552383 3' similar to gb:X54941 CYCLIN-DEPENDENT KINASES REGULATORY SUBUNIT 1 (HUMAN);
9263	18968		3.66	1.0E-128	AW955290.1	EST_HUMAN	601277826F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3618750 5'
116	10353	20182	2.19	1.0E-129	S37722.1	NT	EST367360 MAGC resequences, MAGC Homo sapiens cDNA
407	10353	20182	1.35	1.0E-129	S37722.1	NT	Insulin-like growth factor binding protein-2 [human, placenta, Genomic, 1019 nt, segment 2 of 4]
1689	11591	21461	2.86	1.0E-129	AL099880.1	NT	insulin-like growth factor binding protein-2 [human, placenta, Genomic, 1019 nt, segment 2 of 4]
1693	11595	21465	2.29	1.0E-129	AF240786.1	NT	Novel human mRNA containing Zinc finger C2H2 type domains
1693	11595	21466	2.29	1.0E-129	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
1802	11609	21575	2.43	1.0E-129	11418522	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
2751	12613	22503	1.19	1.0E-129	4505682	NT	Homo sapiens zinc finger protein 76 (expressed in testis) (ZNF76), mRNA
2751	12613	22504	1.19	1.0E-129	4505682	NT	Homo sapiens platelet-derived growth factor receptor, beta polypeptide (PDGFRB) mRNA
3089	13016	22808	1.35	1.0E-129	Q14585	SWISSPROT	Homo sapiens platelet-derived growth factor receptor, beta polypeptide (PDGFRB) mRNA
3089	13016	22809	1.35	1.0E-129	Q14585	SWISSPROT	ZINC FINGER PROTEIN HZF10
3089	13016	22810	1.35	1.0E-129	Q14585	SWISSPROT	ZINC FINGER PROTEIN HZF10
4073	13975	23754	2.2	1.0E-129	AB040892.1	NT	ZINC FINGER PROTEIN HZF10
4183	14083	23856	9.7	1.0E-129	AW755254.1	EST_HUMAN	Homo sapiens mRNA for KIAA1459 protein, partial cds
4183	14083	23857	9.7	1.0E-129	AW755254.1	EST_HUMAN	CMYA5 Human cardiac muscle expression library Homo sapiens cDNA clone 4151935 similar to CMYA5
4183	14083	23857	9.7	1.0E-129	AW755254.1	EST_HUMAN	Cardiomyopathy associated gene 5
4183	14083	23857	9.7	1.0E-129	AW755254.1	EST_HUMAN	CMYA5 Human cardiac muscle expression library Homo sapiens cDNA clone 4151935 similar to CMYA5
4183	14083	23857	9.7	1.0E-129	AW755254.1	EST_HUMAN	Cardiomyopathy associated gene 5

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Table 4
Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5706	15614	25715	2.89	1.0E-129	AJ006345.1	NT	Homo sapiens KVLQT1 gene
6229	16095	26245	5.17	1.0E-129	AJ006345.1	NT	Homo sapiens KVLQT1 gene
6267	16132	26286	7.59	1.0E-129	11420850	NT	Homo sapiens similar to ribosomal protein S26 (H. sapiens) (LOC63694), mRNA
6841	16720		3.68	1.0E-129	AB014534.1	NT	Homo sapiens mRNA for KIAA0634 protein, partial cds
8554	18424	28693	3.52	1.0E-129	AA625526.1	EST_HUMAN	af72107.r1 Soares_NhHMPu_S1 Homo sapiens cDNA clone IMAGE:1047589 5'
8618	16132	26286	9.4	1.0E-129	11420850	NT	Homo sapiens similar to ribosomal protein S26 (H. sapiens) (LOC63694), mRNA
8888	18699	28993	2.04	1.0E-129	AU143115.1	EST_HUMAN	AU143115 Y79AA1 Homo sapiens cDNA clone Y79AA1001410 5'
8888	18699	28994	2.04	1.0E-129	AU143115.1	EST_HUMAN	AU143115 Y79AA1 Homo sapiens cDNA clone Y79AA1001410 5'
9250	18960		1.87	1.0E-129	H83155.1	EST_HUMAN	Yq49c05.r1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:199112 5' similar to SP:B48150 B48150 HP-25-HIBERNATION-RELATED PROTEIN - TAMIAS ASIATICUS-ASIAN ;
9630	19203		1.88	1.0E-129	AL120739.1	EST_HUMAN	DKFZp762K171_r1 782 (synonym: hme12) Homo sapiens cDNA clone DKFZp762K171 5'
1643	11547	21408	6.81	1.0E-130	BE275192.1	EST_HUMAN	601121995F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3346366 5'
1643	11547	21409	6.81	1.0E-130	BE275192.1	EST_HUMAN	601121995F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3346366 5'
1940	11835		2.06	1.0E-130	X04092.1	NT	Human gene for catalase (EC 1.11.1.6) exon 9 mapping to chromosome 11, band p13
2743	12605		7.7	1.0E-130	AJ010230.1	NT	Homo sapiens RET finger protein-like 1 antisense transcript, partial
2849	12777	22564	1.1	1.0E-130	BE564219.1	EST_HUMAN	601343016F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3685466 5'
2849	12777	22565	1.1	1.0E-130	BE564219.1	EST_HUMAN	601343016F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3685466 5'
3530	13446	23243	1.07	1.0E-130	AF240698.1	NT	Homo sapiens retinol dehydrogenase homolog isoform-1 (RDH) mRNA, complete cds
3703	12777	22564	4.77	1.0E-130	BE564219.1	EST_HUMAN	601343016F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3685466 5'
3703	12777	22565	4.77	1.0E-130	BE564219.1	EST_HUMAN	601343016F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3685466 5'
3857	13768	23560	1.09	1.0E-130	AW503580.1	EST_HUMAN	U1-HF-BNO-aky-g-06-0-UI-r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3078731 5'
4438	14333	24122	7.48	1.0E-130	AW843993.1	EST_HUMAN	GM4-CN0045-180200-511-f02 CN0045 Homo sapiens cDNA
5029	14902	24673	1.09	1.0E-130	AW363299.1	EST_HUMAN	RC0-CT0318-201199-031-a11 CT0318 Homo sapiens cDNA
5029	14902	24674	1.09	1.0E-130	AW363299.1	EST_HUMAN	RC0-CT0318-201199-031-a11 CT0318 Homo sapiens cDNA
6301	16165	26322	2.04	1.0E-130	11416777	NT	Homo sapiens solute carrier family 6 (neurotransmitter transporter, L-proline), member 7 (SLC6A7), mRNA
7119	16996	27187	2.45	1.0E-130	AW956242.1	EST_HUMAN	EST368312 IMAGE resequences, MAGD Homo sapiens cDNA
7314	17190	27392	1.57	1.0E-130	AB037756.1	NT	Homo sapiens mRNA for KIAA1335 protein, partial cds
8513	18385	28650	32.43	1.0E-130	M25140.1	NT	Human cardiac alpha-myosin heavy chain (MYH6) gene, exons 2, 3 and 4
4	9991	19782	2.49	0.0E+00	AA228126.1	EST_HUMAN	zr58c04.r1 Soares_NhHMPu_S1 Homo sapiens cDNA clone IMAGE:667590 5' similar to TR:G222811
4	9991	19783	2.49	0.0E+00	AA228126.1	EST_HUMAN	G222811 ALPHA 1 CHAIN OF TYPE XII COLLAGEN ;
7	9993	19786	1.44	0.0E+00	4885136	NT	zr58c04.r1 Soares_NhHMPu_S1 Homo sapiens cDNA clone IMAGE:667590 5' similar to TR:G222811
							G222811 ALPHA 1 CHAIN OF TYPE XII COLLAGEN ;
							Homo sapiens checkpoint suppressor 1 (CHES1), mRNA

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
15	10001	19792	1.34	0.0E+00	89233349	NT	Homo sapiens hypothetical protein FLJ20371 (FLJ20371), mRNA
15	10001	19793	1.34	0.0E+00	89233349	NT	Homo sapiens hypothetical protein FLJ20371 (FLJ20371), mRNA
20	10007	19799	2.45	0.0E+00	D83327.1	NT	Homo sapiens DCRR1 mRNA, partial cds
20	10007	19800	2.45	0.0E+00	D83327.1	NT	Homo sapiens DCRR1 mRNA, partial cds
24	10011	19804	5.57	0.0E+00	AF141349.1	NT	Homo sapiens beta-tubulin mRNA, complete cds
33	10020	19816	0.97	0.0E+00	M58600.1	NT	Human heparin cofactor II (HCF2) gene, exons 1 through 5
35	10022	19819	2.41	0.0E+00	6857625	NT	Homo sapiens RNA-binding protein S1, serine-rich domain (RNPS1), mRNA
51	10038	19845	1.4	0.0E+00	Y17151.2	NT	Homo sapiens mRNA for multidrug resistance protein 3 (ABCC3)
51	10038	19846	1.4	0.0E+00	Y17151.2	NT	Homo sapiens mRNA for multidrug resistance protein 3 (ABCC3)
52	10039	19847	1.22	0.0E+00	D78804.1	EST_HUMAN	HUM516H085 Human placenta polyA+ (TFujware) Homo sapiens cDNA clone GEN-516H08 5'
52	10039	19848	1.22	0.0E+00	D78804.1	EST_HUMAN	HUM516H085 Human placenta polyA+ (TFujware) Homo sapiens cDNA clone GEN-516H08 5'
53	10040	19849	4.14	0.0E+00	L16558.1	NT	Human ribosomal protein L7 (RPL7) mRNA, complete cds
55	10042	19852	8.1	0.0E+00	AW069534.1	EST_HUMAN	cr48e07.x1 Jia bone marrow stroma Homo sapiens cDNA clone HBMSC_cr48e07 3'
55	10042	19853	8.1	0.0E+00	AW069534.1	EST_HUMAN	cr48e07.x1 Jia bone marrow stroma Homo sapiens cDNA clone HBMSC_cr48e07 3'
59	10045	19857	5.8	0.0E+00	M60676.1	NT	Human von Willebrand factor pseudogene corresponding to exons 23 through 34
61	10047	19869	2.75	0.0E+00	M60676.1	NT	Human von Willebrand factor pseudogene corresponding to exons 23 through 34
69	10054	19869	1.77	0.0E+00	4758977	NT	Homo sapiens protein tyrosine phosphatase, non-receptor type substrate 1 (PTPNS1) mRNA
69	10054	19870	1.77	0.0E+00	4758977	NT	Homo sapiens protein tyrosine phosphatase, non-receptor type substrate 1 (PTPNS1) mRNA
71	10054	19869	1.49	0.0E+00	4758977	NT	Homo sapiens protein tyrosine phosphatase, non-receptor type substrate 1 (PTPNS1) mRNA
71	10054	19870	1.49	0.0E+00	4758977	NT	Homo sapiens protein tyrosine phosphatase, non-receptor type substrate 1 (PTPNS1) mRNA
74	10058	19875	42.13	0.0E+00	AA953770.1	EST_HUMAN	cr89e04.s1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:1563870 3' similar to SW:TMOD_HUMAN_P28289 TROPOMODULIN ;
76	10060	19877	1.09	0.0E+00	4501850	NT	Homo sapiens amiloride binding protein 1 (amine oxidase (copper-containing)) (ABP1), nuclear gene encoding mitochondrial protein, mRNA
77	10061	19877	14.77	0.0E+00	4504444	NT	Homo sapiens heterogeneous nuclear ribonucleoprotein A1 (HNRPA1) mRNA
86	10070	19886	47.55	0.0E+00	5076088	NT	Homo sapiens actin, beta (ACTB) mRNA
89	10073	19889	13.39	0.0E+00	U89277.1	NT	Human polyhomeotic 1 homolog (HPH1) mRNA, partial cds
94	10079	19895	1.46	0.0E+00	AI114743.1	EST_HUMAN	HA1347 Human fetal liver cDNA library Homo sapiens cDNA
95	10080	19896	1.03	0.0E+00	AB037794.1	NT	Homo sapiens mRNA for KIAA1363 protein, partial cds
102	10085	19901	6.13	0.0E+00	X91213.1	NT	H. sapiens noc1 gene (exon 2)
110	10091	19906	1.39	0.0E+00	AI623701.1	EST_HUMAN	ts38b05.x1 NCI CGAP_U14 Homo sapiens cDNA clone IMAGE:2230833 3' similar to TR:Q99551 Q99551 MITOCHONDRIAL TRANSCRIPTION TERMINATION FACTOR PRECURSOR ;
111	10091	19906	1.88	0.0E+00	AI623701.1	EST_HUMAN	ts38b05.x1 NCI CGAP_U14 Homo sapiens cDNA clone IMAGE:2230833 3' similar to TR:Q99551 Q99551 MITOCHONDRIAL TRANSCRIPTION TERMINATION FACTOR PRECURSOR ;

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
112	12636	19907	1.83	0.0E+00	N36040.1	EST_HUMAN	Y01109.r1 Soares melanocyte 2NblHM Homo sapiens cDNA clone IMAGE:270017 5'
112	12636	19908	1.83	0.0E+00	N36040.1	EST_HUMAN	Y01109.r1 Soares melanocyte 2NblHM Homo sapiens cDNA clone IMAGE:270017 5'
115	10094	19913	0.86	0.0E+00	4505458	NT	Homo sapiens neurexophilin 2 (NRP2) mRNA
126	10100	19921	3.17	0.0E+00	4505938	NT	Homo sapiens polymerase (RNA) II (DNA directed) polypeptide A (220kD) (POLR2A) mRNA
126	10100	19922	3.17	0.0E+00	4505938	NT	Homo sapiens polymerase (RNA) II (DNA directed) polypeptide A (220kD) (POLR2A) mRNA
135	10108	19929	1.49	0.0E+00	T56945.1	EST_HUMAN	ya83g04.r2 Stratagene fetal spleen (#937205) Homo sapiens cDNA clone IMAGE:68310 5'
135	10108	19930	1.49	0.0E+00	T56945.1	EST_HUMAN	ya83g04.r2 Stratagene fetal spleen (#937205) Homo sapiens cDNA clone IMAGE:68310 5'
147	10121		9.05	0.0E+00	4504444	NT	Homo sapiens heterogeneous nuclear ribonucleoprotein A1 (HNRPA1) mRNA
151	10125	19943	2.42	0.0E+00	BF036881.1	EST_HUMAN	601460375F1 NIH_MGC_06 Homo sapiens cDNA clone IMAGE:3663803 5'
153	10127		15.84	0.0E+00	4504444	NT	Homo sapiens heterogeneous nuclear ribonucleoprotein A1 (HNRPA1) mRNA
166	10130	19946	1.36	0.0E+00	AF111168.2	NT	Homo sapiens serine palmitoyl transferase, submit II gene, complete cds; and unknown genes
168	10132	19947	1.1	0.0E+00	BE295973.1	EST_HUMAN	601174270F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3529864 5'
159	10132	19947	1.18	0.0E+00	BE295973.1	EST_HUMAN	601174270F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3529864 5'
160	10133	19948	2.99	0.0E+00	W73973.1	EST_HUMAN	zb62b05.r1 Soares fetal heart NblHH19W Homo sapiens cDNA clone IMAGE:345201 5' similar to gb.X16282_cds1 ZINC FINGER PROTEIN CLONE 647 (HUMAN);
161	10134	19949	1.51	0.0E+00	AF244088.1	NT	Homo sapiens zinc finger protein mRNA, complete cds
164	10137	19952	18.37	0.0E+00	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
164	10137	19953	18.37	0.0E+00	AL163202.2	NT	Homo sapiens chromosome 21 segment HS21C002
174	10145	19960	4.25	0.0E+00	BE018970.1	EST_HUMAN	bb24e12.y1 NIH_MGC_14 Homo sapiens cDNA clone IMAGE:2963854 5' similar to WP.Y57A10A.Z
174	10145	19961	4.25	0.0E+00	BE018970.1	EST_HUMAN	bb24e12.y1 NIH_MGC_14 Homo sapiens cDNA clone IMAGE:2963854 5' similar to WP.Y57A10A.Z
179	10150	19964	1.98	0.0E+00	AB018327.1	NT	Homo sapiens mRNA for KIAA0784 protein, partial cds
179	10150	19965	1.98	0.0E+00	AB018327.1	NT	Homo sapiens mRNA for KIAA0784 protein, partial cds
187	10159	19976	130.42	0.0E+00	D50859.1	NT	Human gamma-cytoplasmic actin (ACTGP9) pseudogene
192	10164	19981	2.83	0.0E+00	AF273045.1	NT	Homo sapiens CTCL tumor antigen set14-3 mRNA, complete cds
192	10164	19982	2.83	0.0E+00	AF273045.1	NT	Homo sapiens CTCL tumor antigen set14-3 mRNA, complete cds
194	10166	19984	2.92	0.0E+00	AF167174.1	NT	Homo sapiens chromosome X MSL3-2 protein mRNA, complete cds
194	10166	19985	2.92	0.0E+00	AF167174.1	NT	Homo sapiens chromosome X MSL3-2 protein mRNA, complete cds
203	12661	19991	9.33	0.0E+00	AI597308.1	EST_HUMAN	tq04f08.x1 NCL_CGAP_U13 Homo sapiens cDNA clone IMAGE:2207847 3' similar to gb.J03191 PROFILIN 1 (-HUMAN);
203	12661	19992	9.33	0.0E+00	AI597308.1	EST_HUMAN	tq04f08.x1 NCL_CGAP_U13 Homo sapiens cDNA clone IMAGE:2207847 3' similar to gb.J03191 PROFILIN 1 (-HUMAN);
205	10176	19994	1.94	0.0E+00	AF195658.1	NT	Homo sapiens DNA mismatch repair protein (MLH3) gene, complete cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Database Source	Top Hit Descriptor
208	10179		16.66	0.0E+00	NT	Homo sapiens ribosomal protein L31 (RPL31) mRNA
209	10180		3.46	0.0E+00	NT	Homo sapiens TADA1 protein mRNA, complete cds
215	10186	19999	2.48	0.0E+00	NT	Homo sapiens mRNA for KIAA0721 protein, partial cds
216	10186	19999	1.95	0.0E+00	NT	Homo sapiens mRNA for KIAA0721 protein, partial cds
217	10187	20000	1.61	0.0E+00	NT	Mus musculus testis-specific protein, Y-encoded-like (Tspyl), mRNA
224	10195	20004	3.43	0.0E+00	EST_HUMAN	TCBAP1E4466 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP4466
224	10195	20005	3.43	0.0E+00	EST_HUMAN	TCBAP1E4466 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP4466
224	10195	20006	3.43	0.0E+00	EST_HUMAN	TCBAP1E4466 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP4466
225	10195	20004	3.99	0.0E+00	EST_HUMAN	TCBAP1E4466 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP4466
225	10195	20005	3.99	0.0E+00	EST_HUMAN	TCBAP1E4466 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP4466
225	10195	20006	3.99	0.0E+00	EST_HUMAN	TCBAP1E4466 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP4466
226	10195	20004	12.62	0.0E+00	EST_HUMAN	TCBAP1E4466 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP4466
226	10195	20005	12.62	0.0E+00	EST_HUMAN	TCBAP1E4466 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP4466
226	10195	20006	12.62	0.0E+00	EST_HUMAN	TCBAP1E4466 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP4466
238	10206	20023	4.66	0.0E+00	NT	Homo sapiens NS1-associated protein 1 (NSAP1) mRNA
240	10208		6.54	0.0E+00	NT	Homo sapiens chromosome 21 segment HS21C001
247	10213	20029	3.75	0.0E+00	NT	Homo sapiens chromosome 21 unknown mRNA
249	10215	20032	1.46	0.0E+00	NT	H. sapiens mRNA for interferon alfa/beta receptor (long form)
257	10223		6.81	0.0E+00	NT	Homo sapiens chromosome 21 unknown mRNA
269	10234	20050	1.14	0.0E+00	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
269	10234	20051	1.14	0.0E+00	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
270	10236	20053	2.57	0.0E+00	NT	Homo sapiens hypothetical protein (LOC51250), mRNA
281	10246	20066	1.11	0.0E+00	NT	Homo sapiens DCRR1 mRNA, partial cds
281	10246	20067	1.11	0.0E+00	NT	Homo sapiens DCRR1 mRNA, partial cds
282	10247		0.86	0.0E+00	EST_HUMAN	IL2-CT0031-181199-020-B03 CT0031 Homo sapiens cDNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
290	10254	20074	5.26	0.0E+00	4557029	NT	Homo sapiens potassium inwardly-rectifying channel, subfamily J, member 15 (KCNJ15) mRNA
290	10254	20075	5.26	0.0E+00	4557029	NT	Homo sapiens potassium inwardly-rectifying channel, subfamily J, member 15 (KCNJ15) mRNA
307	10265	20085	4.03	0.0E+00	AB028942.1	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
302	10266	20086	3.11	0.0E+00	AB028942.1	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
303	12684		5.3	0.0E+00	4506728	NT	Homo sapiens ribosomal protein S5 (RPS5) mRNA
304	10267	20087	1.99	0.0E+00	4503914	NT	Homo sapiens phosphoribosylglycinamide formyltransferase, phosphoribosylglycinamide synthetase,
305	10268		2.03	0.0E+00	AA480002.1	EST_HUMAN	phosphoribosylglycinamide synthetase (GART) mRNA
306	10269	20088	13.28	0.0E+00	4507152	NT	zvl8c06.r1 Soares_NhHMPu_S1 Homo sapiens cDNA clone IMAGE:753994 5'
307	10269	20088	9.68	0.0E+00	4507152	NT	Homo sapiens SON DNA binding protein (SON) mRNA
311	10273	20092	2.23	0.0E+00	AF114488.1	NT	Homo sapiens SON DNA binding protein (SON) mRNA
324	10285	20101	0.9	0.0E+00	O14867	SWISSPROT	Homo sapiens SON DNA binding protein (SON) mRNA
324	10285	20102	0.9	0.0E+00	O14867	SWISSPROT	Homo sapiens intersectin short isoform (ITSN) mRNA, complete cds
325	10286	20103	4.18	0.0E+00	7657213	NT	TRANSCRIPTION REGULATOR PROTEIN BACH1 (BTB AND CNC HOMOLOG 1) (HA2303)
326	10286	20103	2.31	0.0E+00	7657213	NT	TRANSCRIPTION REGULATOR PROTEIN BACH1 (BTB AND CNC HOMOLOG 1) (HA2303)
							Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK) mRNA
							Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK) mRNA
							Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (trithorax (Drosophila) homolog); translocated to, 4 (MLLT4) mRNA
341	10300	20115	3.67	0.0E+00	5174574	NT	Homo sapiens moesin (MSN) mRNA
342	10301	20116	0.86	0.0E+00	4505256	NT	Homo sapiens X-box binding protein 1 (XBP1) mRNA
345	10304	20120	3.76	0.0E+00	4827057	NT	Human zinc finger protein zfp31 (zfp31) mRNA, partial cds
348	10307	20125	0.8	0.0E+00	U71600.1	NT	Homo sapiens chromosome 21 unknown mRNA
353	10311	20129	2.15	0.0E+00	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
353	10311	20130	2.15	0.0E+00	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
354	12695	20131	3.4	0.0E+00	AF231919.1	NT	Homo sapiens chromosome 21 unknown mRNA
356	10313	20133	0.89	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
358	10315	20136	1.4	0.0E+00	4503854	NT	Homo sapiens GA-binding protein transcription factor, alpha subunit (60kD) (GABPA), mRNA
359	10316	20137	1.37	0.0E+00	D80006.1	NT	Human mRNA for KIAA0184 gene, partial cds
360	10316	20137	1.52	0.0E+00	D80006.1	NT	Human mRNA for KIAA0184 gene, partial cds
372	10326	20149	1.13	0.0E+00	AU134963.1	EST_HUMAN	AU134963 PLACE1 Homo sapiens cDNA clone PLACE1000899 5'
391	10365	20188	5.35	0.0E+00	AB028942.1	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
382	10366	20189	1.01	0.0E+00	A1363014.1	EST_HUMAN	qy61h05.x1 NC1 CGAP Brn25 Homo sapiens cDNA clone IMAGE:2018467 3' similar to gb:X54199
387	10334	20156	3.43	0.0E+00	AW754180.1	EST_HUMAN	PHOSPHORIBOSYLAMINE-GLYCINE LIGASE (HUMAN);
390	10336	20159	1.38	0.0E+00	4503680	NT	RC2-CT0320-300100-016-a09 CT0320 Homo sapiens cDNA
391	10337	20160	2.04	0.0E+00	4503680	NT	Homo sapiens IgG Fc binding protein (FC(GAMMA)BP) mRNA
							Homo sapiens IgG Fc binding protein (FC(GAMMA)BP) mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
391	10337	20161	2.04	0.0E+00	4503680	NT	Homo sapiens IgG Fc binding protein (FC(GAMMA)BP) mRNA
392	10338	20162	1.17	0.0E+00	4503680	NT	Homo sapiens IgG Fc binding protein (FC(GAMMA)BP) mRNA
393	10339	20163	1.64	0.0E+00	4503680	NT	Homo sapiens IgG Fc binding protein (FC(GAMMA)BP) mRNA
393	10339	20164	1.64	0.0E+00	4503680	NT	Homo sapiens IgG Fc binding protein (FC(GAMMA)BP) mRNA
394	10340	20165	2.43	0.0E+00	4503680	NT	Homo sapiens IgG Fc binding protein (FC(GAMMA)BP) mRNA
395	10341	20166	0.9	0.0E+00	4503680	NT	Homo sapiens IgG Fc binding protein (FC(GAMMA)BP) mRNA
396	10342	20167	0.84	0.0E+00	X74870.1	NT	H. sapiens gene for RNA pol II largest subunit, exons 23-29
396	10342	20168	0.84	0.0E+00	X74870.1	NT	H. sapiens gene for RNA pol II largest subunit, exons 23-29
400	10346		43.09	0.0E+00	4506608	NT	Homo sapiens ribosomal protein L19 (RPL19) mRNA
414	9981	19772	1.31	0.0E+00	R17795.1	EST_HUMAN	y909a02.1 Soares infant brain 1N1B Homo sapiens cDNA clone IMAGE:31652 5'
422	10367		2.61	0.0E+00	4506728	NT	Homo sapiens ribosomal protein S5 (RPS5) mRNA
423	10368	20190	2.42	0.0E+00	AB028942.1	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
424	10369	20191	4.7	0.0E+00	4507152	NT	Homo sapiens SON DNA binding protein (SON) mRNA
424	10369	20192	4.7	0.0E+00	4507152	NT	Homo sapiens SON DNA binding protein (SON) mRNA
425	10370	20193	3.51	0.0E+00	AF193807.1	NT	Mus musculus truncated SON protein (Son) mRNA, complete cds
438	10382	20206	2.01	0.0E+00	4557879	NT	Homo sapiens interferon gamma receptor 1 (IFNGR1) mRNA
443	10387		0.98	0.0E+00	AA324262.1	EST_HUMAN	EST27054 Cerebellum II Homo sapiens cDNA 5' end
444	10388		0.91	0.0E+00	BE254447.1	EST_HUMAN	601111520F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3352348 5'
460	10404	20220	3.15	0.0E+00	4504532	NT	Homo sapiens 5-hydroxytryptamine (serotonin) receptor 1B (HTR1B) mRNA
460	10404	20221	3.15	0.0E+00	4504532	NT	Homo sapiens 5-hydroxytryptamine (serotonin) receptor 1B (HTR1B) mRNA
465	10408	20229	1.27	0.0E+00	4557887	NT	Homo sapiens keratin 18 (KRT18) mRNA
465	10408	20229	1.27	0.0E+00	4557887	NT	Homo sapiens keratin 18 (KRT18) mRNA
475	10419	20235	2.26	0.0E+00	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
475	10420	20236	7.05	0.0E+00	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
476	10420	20237	7.05	0.0E+00	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
485	10428	20242	2.59	0.0E+00	AB033035.1	NT	Homo sapiens mRNA for KIAA1209 protein, partial cds
487	10430	20244	1.64	0.0E+00	AU132898.1	EST_HUMAN	AU132898 NT2RP4 Homo sapiens cDNA clone NT2RP4000837 5'
495	10438	20250	2.17	0.0E+00	BE385144.1	EST_HUMAN	601274951F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3615756 5'
496	12668	20251	1.05	0.0E+00	AW938825.1	EST_HUMAN	PM0-DT0065-130400-002-c08 DT0065 Homo sapiens cDNA
498	10440	20253	1.07	0.0E+00	AL117233.1	NT	Novel human gene mapping to chromosome 1
499	10441	20254	1.64	0.0E+00	8923955	NT	Homo sapiens PC326 protein (PC326), mRNA
508	10450	20263	3.91	0.0E+00	AL163210.2	NT	Homo sapiens chromosome 21 segment HS21C010
515	12669	20267	1.97	0.0E+00	BE081827.1	EST_HUMAN	QV2-BT0635-160400-142-h05 BT0635 Homo sapiens cDNA
520	10462	20273	1.13	0.0E+00	BF028005.1	EST_HUMAN	601764858F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:3996998 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
526	10468	20280	1.16	0.0E+00	AB040909.1	NT	Homo sapiens mRNA for KIAA1476 protein, partial cds
529	10471	20283	11.27	0.0E+00	6006030	NT	Homo sapiens transcription elongation factor B (SIII), polypeptide 1-like (TCB1L) mRNA
530	10472	20284	3.96	0.0E+00	4504036	NT	Homo sapiens guanine nucleotide binding protein (G protein), alpha 11 (Gq class) (GNA11) mRNA
530	10472	20285	3.96	0.0E+00	4504036	NT	Homo sapiens guanine nucleotide binding protein (G protein), alpha 11 (Gq class) (GNA11) mRNA
536	10477		5.78	0.0E+00	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
544	10485	20295	1.79	0.0E+00	AW135324.1	EST_HUMAN	U1-H-B11-ecb-h-04-0-U1.s1 NCL CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2713951 3'
554	10495		3.15	0.0E+00	D10083.1	NT	Homo sapiens RGH1 gene, retrovirus-like element
571	10510	20318	2.65	0.0E+00	5174742	NT	Homo sapiens ubiquinol-cytochrome c reductase, Rieske iron-sulfur polypeptide 1 (UQCRCF1), nuclear gene encoding mitochondrial protein, mRNA
584	10522		5.28	0.0E+00	J04093.1	NT	Human apolipoprotein A-I (ApoA-I) gene, exon 1
587	10525	20332	1.73	0.0E+00	BF104898.1	EST_HUMAN	601822627F1 NIH_MGC_75 Homo sapiens cDNA clone IMAGE:4045447 5'
593	10529	20336	1.46	0.0E+00	4501854	NT	Homo sapiens acetyl-Coenzyme A carboxylase beta (ACACB), mRNA
598	10534	20342	1.05	0.0E+00	AF221712.1	NT	Homo sapiens Smad- and Olf-interacting zinc finger protein mRNA, partial cds
598	10534	20343	1.05	0.0E+00	AF221712.1	NT	Homo sapiens Smad- and Olf-interacting zinc finger protein mRNA, partial cds
607	10543	20351	1.38	0.0E+00	AF149773.1	NT	Homo sapiens NOD1 protein (NOD1) gene, exons 1, 2, and 3
610	10546	20354	0.96	0.0E+00	6806918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
611	10547	20355	2.22	0.0E+00	6806918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
611	10547	20356	2.22	0.0E+00	6806918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
612	10548	20357	0.93	0.0E+00	6806918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
612	10548	20358	0.93	0.0E+00	6806918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
619	10556	20368	1.34	0.0E+00	AA359486.1	EST_HUMAN	z60c07.r1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:726732 5'
623	10560	20372	6.37	0.0E+00	D11078.1	NT	Homo sapiens RGH2 gene, retrovirus-like element
627	10564	20375	3.17	0.0E+00	W78811.1	EST_HUMAN	zh51b04.r1 Soares_fetal_liver_spleen_1NFSL_S1 Homo sapiens cDNA clone IMAGE:415567 5' similar to gb:A21187 ALPHA-2-MACROGLOBULIN PRECURSOR (HUMAN);
627	10564	20376	3.17	0.0E+00	W78811.1	EST_HUMAN	zh51b04.r1 Soares_fetal_liver_spleen_1NFSL_S1 Homo sapiens cDNA clone IMAGE:415567 5' similar to gb:A21187 ALPHA-2-MACROGLOBULIN PRECURSOR (HUMAN);
630	10567		3.28	0.0E+00	4885526	NT	Homo sapiens novel SH2-containing protein 3 (NSP3) mRNA
637	10574	20388	2.89	0.0E+00	6006003	NT	Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2B (GRIN2B) mRNA
639	10576	20391	1.06	0.0E+00	5031624	NT	Homo sapiens CCAAT-box-binding transcription factor (CBF2) mRNA
642	10579	20395	1.41	0.0E+00	U05235.1	NT	Human neutral amino acid transporter (ASCT1) gene, exon 8
646	10583	20398	2.18	0.0E+00	AF108389.1	NT	Homo sapiens sodium/calcium exchanger isoform NaCa3 (NCX1) mRNA, complete cds
646	10583	20399	2.18	0.0E+00	AF108389.1	NT	Homo sapiens sodium/calcium exchanger isoform NaCa3 (NCX1) mRNA, complete cds
652	10588	20404	3.98	0.0E+00	4826947	NT	Homo sapiens protein kinase, X-linked (PRKX) mRNA

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Table 4
Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
652	10588	20405	3.98	0.0E+00	4826947	NT	Homo sapiens protein kinase, X-linked (PRKX) mRNA
658	12672		0.95	0.0E+00	X57147.1	NT	Human endogenous retrovirus pHE.1 (ERV9)
667	10601	20419	4.56	0.0E+00	4504424	NT	Homo sapiens high-mobility group (nonhistone chromosomal) protein 1 (HMG1) mRNA
672	10606	20423	4.35	0.0E+00	AB029012.1	NT	Homo sapiens mRNA for KIAA1089 protein, partial cds
682	10615	20438	2.03	0.0E+00	7657468	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
692	10625	20450	19.46	0.0E+00	AA614537.1	EST_HUMAN	np49d01.s1 NCI_CGAP_Br.1.1 Homo sapiens cDNA clone IMAGE:1129633 3' similar to gb.X57352 INTERFERON-INDUCIBLE PROTEIN 1-8U (HUMAN);
696	10629	20454	7.66	0.0E+00	M60675.1	NT	Human von Willebrand factor gene, exons 23 through 34
698	10629	20455	7.66	0.0E+00	M60675.1	NT	Human von Willebrand factor gene, exons 23 through 34
706	10639	20464	1.45	0.0E+00	5032192	NT	Homo sapiens TNF receptor-associated factor 1 (TRAF1) mRNA
712	10644	20470	3.89	0.0E+00	AF284750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
712	10644	20471	3.89	0.0E+00	AF284750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
714	10646	20474	9.78	0.0E+00	11545800	NT	Homo sapiens hypothetical protein FLJ21634 (FLJ21634), mRNA
719	10651	20481	1.7	0.0E+00	BE241577.1	EST_HUMAN	TCAAP-D0779 Pediatric acute myelogenous leukemia cell (FAB M1) Baylor-HGSC project=TCAA Homo sapiens cDNA clone TCAAP0779
739	10670	20505	1.12	0.0E+00	AF226990.2	NT	Homo sapiens MHC class I antigen (HLA-G) mRNA, HLA-G1 allele, complete cds
739	10670	20506	1.12	0.0E+00	AF226990.2	NT	Homo sapiens MHC class I antigen (HLA-G) mRNA, HLA-G1 allele, complete cds
740	10671	20507	2.4	0.0E+00	AF170492.1	NT	Homo sapiens chloride channel CLC4 (CLC4) mRNA, complete cds
743	10674	20510	1.55	0.0E+00	J03764.1	NT	Human, plasminogen activator inhibitor-1 gene, exons 2 to 9
743	10674	20511	1.55	0.0E+00	J03764.1	NT	Human, plasminogen activator inhibitor-1 gene, exons 2 to 9
745	10676	20512	0.78	0.0E+00	AB037760.1	NT	Homo sapiens mRNA for KIAA1339 protein, partial cds
746	10677	20513	1.12	0.0E+00	6912749	NT	Homo sapiens zinc finger protein 212 (ZNF212), mRNA
747	12676	20514	0.81	0.0E+00	D30612.1	NT	Homo sapiens mRNA for repressor protein, partial cds
748	10678	20515	2.17	0.0E+00	BE869735.1	EST_HUMAN	601445647F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3849803 5'
752	10682	20519	3.38	0.0E+00	R48915.1	EST_HUMAN	y69g08.r1 Soares breast 2NblHbSt Homo sapiens cDNA clone IMAGE:154046 5'
753	10683	20520	2.4	0.0E+00	5032086	NT	Homo sapiens splicing factor 3a, subunit 1, 120kD (SF3A1), mRNA
762	10692	20529	1.58	0.0E+00	AB011399.1	NT	Homo sapiens gene for AF-6, complete cds
765	10696	20533	2.97	0.0E+00	7661965	NT	Homo sapiens KIAA0170 gene product (KIAA0170), mRNA
775	10705	20544	1.17	0.0E+00	D80006.1	NT	Human mRNA for KIAA0184 gene, partial cds
775	10705	20545	1.17	0.0E+00	D80006.1	NT	Human mRNA for KIAA0184 gene, partial cds
780	10710	20549	2.64	0.0E+00	X89772.1	NT	H.sapiens mRNA for interferon alpha/beta receptor (long form)
784	10714	20553	2.37	0.0E+00	AB020717.1	NT	Homo sapiens mRNA for KIAA0910 protein, partial cds
784	10714	20554	2.37	0.0E+00	AB020717.1	NT	Homo sapiens mRNA for KIAA0910 protein, partial cds
789	10718	20560	6.84	0.0E+00	5174478	NT	Homo sapiens pericentrin (PCNT) mRNA

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
790	10719		7.06	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
807	10736	20581	1.51	0.0E+00	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
808	10737	20582	4.43	0.0E+00	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
810	10739	20584	3.91	0.0E+00	4557686	NT	Homo sapiens potassium voltage-gated channel, Isk-related family, member 1 (KCNE1) mRNA
816	10744	20590	1.24	0.0E+00	AF103830.1	NT	Homo sapiens serine-threonine protein kinase (MNBH) mRNA, complete cds
816	10744	20591	1.24	0.0E+00	AF103830.1	NT	Homo sapiens serine-threonine protein kinase (MNBH) mRNA, complete cds
821	10749	20596	1.14	0.0E+00	4503854	NT	Homo sapiens GA-binding protein transcription factor, alpha subunit (60kD) (GABPA), mRNA
825	10752	20601	1.55	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
825	10752	20602	1.55	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
832	10759		1.57	0.0E+00	AF027153.1	NT	Homo sapiens sodium/myo-inositol cotransporter (SLC5A3) gene, complete cds
836	10763	20613	3.37	0.0E+00	AB028942.1	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
836	10763	20614	3.37	0.0E+00	AB028942.1	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
837	10764	20615	7.38	0.0E+00	4507452	NT	Homo sapiens SON DNA binding protein (SON) mRNA
838	10765	20616	3.03	0.0E+00	AB028942.1	NT	Homo sapiens mRNA for KIAA1019 protein, partial cds
839	10766	20617	2.02	0.0E+00	4506728	NT	Homo sapiens ribosomal protein S5 (RPS5) mRNA
843	10770	20620	1.25	0.0E+00	AB020717.1	NT	Homo sapiens mRNA for KIAA0910 protein, partial cds
843	10770	20621	1.25	0.0E+00	AB020717.1	NT	Homo sapiens mRNA for KIAA0910 protein, partial cds
844	10771	20622	1.97	0.0E+00	AA533272.1	EST_HUMAN	h168d07.s1 NCI CGAP_P10 Homo sapiens cDNA clone IMAGE:997453
844	10771	20623	1.97	0.0E+00	AA533272.1	EST_HUMAN	h168d07.s1 NCI CGAP_P10 Homo sapiens cDNA clone IMAGE:997453
845	10772		7.39	0.0E+00	BF677694.1	EST_HUMAN	602085579F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4249915 5'
849	10776	20624	1.3	0.0E+00	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
849	10776	20625	1.3	0.0E+00	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
850	10777	20626	2.16	0.0E+00	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
850	10777	20627	2.16	0.0E+00	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA
873	10799	20650	0.87	0.0E+00	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
880	10806	20655	1.85	0.0E+00	BE089592.1	EST_HUMAN	QV0-BT0703-280400-211-g11 BT0703 Homo sapiens cDNA
880	10806	20656	1.85	0.0E+00	BE089592.1	EST_HUMAN	QV0-BT0703-280400-211-g11 BT0703 Homo sapiens cDNA
890	10816	20665	3.93	0.0E+00	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
900	10825		7.45	0.0E+00	4504958	NT	Homo sapiens laminin receptor 1 (67kD, ribosomal protein SA) (LAMR1), mRNA
903	10825		3.29	0.0E+00	4504958	NT	Homo sapiens laminin receptor 1 (67kD, ribosomal protein SA) (LAMR1), mRNA
904	10828	20673	1.5	0.0E+00	AF089747.1	NT	Homo sapiens alpha-1-antitrypsin precursor, mRNA, partial cds
905	10829	20674	0.99	0.0E+00	S63364.1	NT	protein C inhibitor [human, leukocytes, Genomic, 1216 nt, segment 2 of 5]
905	10829	20675	0.99	0.0E+00	S63364.1	NT	protein C inhibitor [human, leukocytes, Genomic, 1216 nt, segment 2 of 5]
905	10829	20676	0.99	0.0E+00	S63364.1	NT	protein C inhibitor [human, leukocytes, Genomic, 1216 nt, segment 2 of 5]

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
906	10830	20677	2.14	0.0E+00	L28101.1	NT	Homo sapiens kallistatin (P14) gene, exons 1-4, complete cds
909	10833	20680	105.13	0.0E+00	Z20656.1	NT	Homo sapiens of cardiac alpha-myosin heavy chain gene
909	10833	20681	105.13	0.0E+00	Z20656.1	NT	Homo sapiens of cardiac alpha-myosin heavy chain gene
910	10834	20682	167.64	0.0E+00	Z20656.1	NT	Homo sapiens of cardiac alpha-myosin heavy chain gene
910	10834	20683	167.64	0.0E+00	Z20656.1	NT	Homo sapiens of cardiac alpha-myosin heavy chain gene
935	10860	20706	36.3	0.0E+00	M37190.1	NT	Human ras inhibitor mRNA, 3' end
936	10861	20707	13.25	0.0E+00	M37190.1	NT	Human ras inhibitor mRNA, 3' end
937	10862	20708	53.71	0.0E+00	M37190.1	NT	Human ras inhibitor mRNA, 3' end
938	10863	20709	1.9	0.0E+00	4507430	NT	Homo sapiens thymotrophic embryonic factor (TEF), mRNA
938	10863	20710	1.9	0.0E+00	4507430	NT	Homo sapiens thymotrophic embryonic factor (TEF), mRNA
946	12681	20717	2.46	0.0E+00	A1001948.1	EST_HUMAN	os98e03.s1 NCI_CGAP_GC3 Homo sapiens cDNA clone IMAGE:7613404 3'
946	12681	20718	2.46	0.0E+00	A1001948.1	EST_HUMAN	os98e03.s1 NCI_CGAP_GC3 Homo sapiens cDNA clone IMAGE:7613404 3'
948	10872	20720	7.21	0.0E+00	7657266	NT	Homo sapiens KIAA0929 protein Msx2 interacting nuclear target (MINT) homolog (KIAA0929), mRNA
959	10882	20730	2.52	0.0E+00	AB030566.1	NT	Homo sapiens mRNA for PSP24, complete cds
967	10890	20736	4.64	0.0E+00	BF366974.1	EST_HUMAN	PM2-GN0014-050900-001-f02 GN0014 Homo sapiens cDNA
967	10890	20737	4.64	0.0E+00	BF366974.1	EST_HUMAN	PM2-GN0014-050900-001-f02 GN0014 Homo sapiens cDNA
967	10890	20738	4.64	0.0E+00	BF366974.1	EST_HUMAN	PM2-GN0014-050900-001-f02 GN0014 Homo sapiens cDNA
968	10891	20739	1.27	0.0E+00	X52207.1	NT	Homo sapiens partial c-fgr gene, exons 2 and 3
968	10891	20740	1.27	0.0E+00	X52207.1	NT	Homo sapiens partial c-fgr gene, exons 2 and 3
977	10900	20747	1.25	0.0E+00	4757969	NT	Homo sapiens chromodomain protein, Y chromosome-like (CDYL) mRNA
988	10910	20765	1.05	0.0E+00	U83668.1	NT	Human beta-tubulin (TUB4q) gene, complete cds
989	10911	20766	7.48	0.0E+00	U83668.1	NT	Human beta-tubulin (TUB4q) gene, complete cds
990	10911	20766	6.69	0.0E+00	U83668.1	NT	Human beta-tubulin (TUB4q) gene, complete cds
993	10914		1.96	0.0E+00	AF198490.1	NT	Homo sapiens Bq22.1 region and MTG8 (QBFA2T1) gene, partial cds
994	10914		3.49	0.0E+00	AF198490.1	NT	Homo sapiens Bq22.1 region and MTG8 (QBFA2T1) gene, partial cds
997	10917	20761	0.84	0.0E+00	AF111170.3	NT	Homo sapiens 14q32 Jagged2 gene, complete cds; and unknown gene
998	10917	20761	1.43	0.0E+00	AF111170.3	NT	Homo sapiens 14q32 Jagged2 gene, complete cds; and unknown gene
999	10917	20761	1.81	0.0E+00	AF111170.3	NT	Homo sapiens 14q32 Jagged2 gene, complete cds; and unknown gene
1000	10918	20762	2.23	0.0E+00	AF111170.3	NT	Homo sapiens 14q32 Jagged2 gene, complete cds; and unknown gene
1003	10921	20765	2.28	0.0E+00	7661685	NT	Homo sapiens DKFZP586M0122 protein (DKFZP586M0122), mRNA
1007	10925	20769	2.66	0.0E+00	5803114	NT	Homo sapiens inner membrane protein, mitochondrial (IMMT), mRNA
1009	10927		1.94	0.0E+00	AA458680.1	EST_HUMAN	aa88g07.s1 Stratagene fetal retina 937202 Homo sapiens cDNA clone IMAGE:838236 3' similar to SW:PRS8_HUMAN P47210 26S PROTEASE REGULATORY SUBUNIT 8;

Table 4

Single Exon Probes Expressed In Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1012	10930	20774	1.04	0.0E+00	N43182.1	EST_HUMAN	EST5124 WATM1 Homo sapiens cDNA clone 51124 similar to DNA-DIRECTED RNA POLYMERASE II (alignment Ser and Pro with BLASTx or p)
1012	10930	20775	1.04	0.0E+00	N43182.1	EST_HUMAN	EST5124 WATM1 Homo sapiens cDNA clone 51124 similar to DNA-DIRECTED RNA POLYMERASE II (alignment Ser and Pro with BLASTx or p)
1013	10931	20776	0.97	0.0E+00	4759249	NT	Homo sapiens TRAF family member-associated NFKB activator (TANK) mRNA
1013	10931	20777	0.97	0.0E+00	4759249	NT	Homo sapiens TRAF family member-associated NFKB activator (TANK) mRNA
1017	10935		4.44	0.0E+00	8922333	NT	Homo sapiens hypothetical protein FLJ11196 (FLJ11196), mRNA
1031	10949	20792	2.19	0.0E+00	4758559	NT	Homo sapiens heat shock 70kD protein 9B (mortalin-2) (HSPA9B) mRNA
1049	10965	20807	1.88	0.0E+00	4826672	NT	Homo sapiens cadherin 6, K-cadherin (fetal kidney) (CDH6) mRNA
1049	10966	20808	1.88	0.0E+00	4826672	NT	Homo sapiens cadherin 6, K-cadherin (fetal kidney) (CDH6) mRNA
1053	10970	20812	2.52	0.0E+00	8923624	NT	Homo sapiens hypothetical protein FLJ20695 (FLJ20695), mRNA
1053	10970	20813	2.52	0.0E+00	8923624	NT	Homo sapiens hypothetical protein FLJ20695 (FLJ20695), mRNA
1054	10971	20814	38.24	0.0E+00	AJ245922.1	NT	Homo sapiens mRNA for alpha-tubulin 8 (TUBA8 gene)
1056	10973		0.93	0.0E+00	8923087	NT	Homo sapiens hypothetical protein FLJ20080 (FLJ20080), mRNA
1058	10975	20818	3.28	0.0E+00	5174384	NT	Homo sapiens alkylation repair, alkB homolog (ABH), mRNA
1066	10982	20827	3.58	0.0E+00	4758117	NT	Homo sapiens Death associated protein 3 (DAP3) mRNA
1080	10996	20837	3.6	0.0E+00	BE005208.1	EST_HUMAN	MR0-BN0115-200300-003-h08 BN0115 Homo sapiens cDNA
1103	11019	20861	3.79	0.0E+00	7706134	NT	Homo sapiens potassium channel, subfamily K, member 9 (KCNK9), mRNA
1103	11019	20862	3.79	0.0E+00	7706134	NT	Homo sapiens potassium channel, subfamily K, member 9 (KCNK9), mRNA
1116	11031	20872	1.12	0.0E+00	4826947	NT	Homo sapiens protein kinase, X-linked (PRKX) mRNA
1116	11031	20873	1.12	0.0E+00	4826947	NT	Homo sapiens protein kinase, X-linked (PRKX) mRNA
1117	11032	20874	5.7	0.0E+00	4506712	NT	Homo sapiens ribosomal protein S27a (RPS27A) mRNA
1119	11034	20876	0.86	0.0E+00	8923290	NT	Homo sapiens hypothetical protein FLJ20309 (FLJ20309), mRNA
1121	11036	20878	10.18	0.0E+00	AB002059.1	NT	Homo sapiens DNA for Human P2XM, complete cds
1123	11038	20879	12.02	0.0E+00	AB002059.1	NT	Homo sapiens DNA for Human P2XM, complete cds
1124	11039	20880	2.03	0.0E+00	7657458	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
1124	11039	20881	2.03	0.0E+00	7657458	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
1128	11042	20884	0.95	0.0E+00	7706500	NT	Homo sapiens Npw38-binding protein NpwBP (LOC51729), mRNA
1129	11043	20885	1	0.0E+00	A1147650.1	EST_HUMAN	q522d10.x1 Scores: pregnant uterus NblPU Homo sapiens cDNA clone IMAGE:1697011 3'
1131	11045	20887	1.44	0.0E+00	AB020710.1	NT	Homo sapiens mRNA for KIAA0903 protein, partial cds
1140	11054	20896	1.13	0.0E+00	9966844	NT	Homo sapiens chromosome 12 open reading frame 3 (C12ORF3), mRNA
1152	11065	20908	2.31	0.0E+00	7305076	NT	Homo sapiens glutamate decarboxylase 1 (brain, 67kD) (GAD1), transcript variant GAD25, mRNA
1152	11065	20909	2.31	0.0E+00	7305076	NT	Homo sapiens glutamate decarboxylase 1 (brain, 67kD) (GAD1), transcript variant GAD25, mRNA
1154	11067	20911	1.59	0.0E+00	AB037835.1	NT	Homo sapiens mRNA for KIAA1414 protein, partial cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1161	11074	20920	1.02	0.0E+00	4557887	NT	Homo sapiens keratin 18 (KRT18) mRNA
1191	11101		1.13	0.0E+00	7657336	NT	Homo sapiens mult. (E. coli) homolog 3 (MLH3), mRNA
1206	11116	20962	1.14	0.0E+00	AF264750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
1206	11116	20963	1.14	0.0E+00	AF264750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
1207	11117	20964	1.31	0.0E+00	AF264750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
1208	12687	20965	0.95	0.0E+00	AF264750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
1226	11134	20988	3.62	0.0E+00	AF109718.1	NT	Homo sapiens chromosome 3 subtelomeric region
1227	11135	20989	1.3	0.0E+00	4503098	NT	Homo sapiens chondroitin sulfate proteoglycan 4 (melanoma-associated) (CSPG4), mRNA
1245	11152		1.48	0.0E+00	Y18000.1	NT	Homo sapiens NF2 gene
1253	11160	21009	45.69	0.0E+00	4506718	NT	Homo sapiens ribosomal protein S2 (RPS2) mRNA
1260	11167	21018	3.66	0.0E+00	AF084479.1	NT	Homo sapiens Williams-Beuren syndrome deletion transcript 9 (WBSCR9) mRNA, complete cds
1266	11173	21022	1.71	0.0E+00	AB040940.1	NT	Homo sapiens mRNA for KIAA1507 protein, partial cds
1266	11173	21023	1.71	0.0E+00	AB040940.1	NT	Homo sapiens mRNA for KIAA1507 protein, partial cds
1278	11186	21036	6.42	0.0E+00	5174748	NT	Homo sapiens Wolfram syndrome (WFS) mRNA
1278	11186	21037	6.42	0.0E+00	5174748	NT	Homo sapiens Wolfram syndrome (WFS) mRNA
1278	11186	21038	6.42	0.0E+00	5174748	NT	Homo sapiens Wolfram syndrome (WFS) mRNA
1279	11187		2.6	0.0E+00	AF086156.1	NT	Homo sapiens protein phosphatase 2A BR gamma subunit gene, exon 5
1289	12689	21050	1.1	0.0E+00	7657829	NT	Homo sapiens rhabdoid tumor deletion region protein 1 (RTDR1), mRNA
1289	12689	21051	1.1	0.0E+00	7657829	NT	Homo sapiens rhabdoid tumor deletion region protein 1 (RTDR1), mRNA
1295	11202	21057	1.71	0.0E+00	5803146	NT	Homo sapiens ring finger protein 9 (RNF9), mRNA
1296	11203	21058	0.82	0.0E+00	4508004	NT	Homo sapiens zinc finger protein 173 (ZNF173) mRNA
1296	11205	21059	1.07	0.0E+00	5803146	NT	Homo sapiens ring finger protein 9 (RNF9), mRNA
1300	11207	21061	4.1	0.0E+00	AB011149.1	NT	Homo sapiens mRNA for KIAA0577 protein, complete cds
1301	11208	21062	1.06	0.0E+00	7661965	NT	Homo sapiens KIAA0170 gene product (KIAA0170), mRNA
1302	11209	21063	4.64	0.0E+00	7661965	NT	Homo sapiens KIAA0170 gene product (KIAA0170), mRNA
1303	11210	21064	4.1	0.0E+00	8667387	NT	Homo sapiens period (Drosophila) homolog 3 (PER3), mRNA
1303	11210	21065	4.1	0.0E+00	8667387	NT	Homo sapiens period (Drosophila) homolog 3 (PER3), mRNA
1315	11221	21078	1.35	0.0E+00	M14123.1	NT	Human endogenous retrovirus HERV-K10
1366	11291	21147	0.89	0.0E+00	AJ250014.1	NT	Homo sapiens mRNA for Familial Cylindromatosis cyd gene
1393	11298	21156	9.13	0.0E+00	AJ277892.1	NT	Homo sapiens partial TTN gene for titin
1396	11301	21160	0.96	0.0E+00	AJ208756.1	EST_HUMAN	qg38b06.x1 Scores_leatis_NHT Homo sapiens cDNA clone IMAGE:1837427 3' similar to WP.T27A1.5 CE14213 ;
1397	11302	21161	8.18	0.0E+00	6042206	NT	RAN, member RAS oncogene family Homo sapiens RAN, member RAS oncogene family (RAN), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1407	11312	21173	1.4	0.0E+00	4505646	NT	Homo sapiens proprotein convertase subtilisin/kexin type 2 (PCSK2) mRNA
1407	11312	21174	1.4	0.0E+00	4505646	NT	Homo sapiens proprotein convertase subtilisin/kexin type 2 (PCSK2) mRNA
1409	11314	21177	2.54	0.0E+00	7705565	NT	Homo sapiens KIAA1114 protein (KIAA1114), mRNA
1409	11314	21178	2.54	0.0E+00	7705565	NT	Homo sapiens KIAA1114 protein (KIAA1114), mRNA
1412	11317	21180	5.25	0.0E+00	AJ238093.1	NT	Homo sapiens partial AF-4 gene, exons 2 to 7 and Alu repeat elements
1421	11327	21192	3.51	0.0E+00	AF038280.1	NT	Homo sapiens alpha1-6fucosyltransferase (alpha1-6FucT) gene, exon 7
1432	11337	21203	9.7	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
1432	11337	21204	9.7	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
1437	11342	21208	1.02	0.0E+00	U35837.1	NT	Human nebulin mRNA, partial cds
1437	11342	21209	1.02	0.0E+00	U35837.1	NT	Human nebulin mRNA, partial cds
1445	11350	21214	3.05	0.0E+00	AL132999.1	NT	Novel human gene on chromosome 20
1447	11352	21215	1.03	0.0E+00	AL137764.1	NT	Novel human gene mapping to chromosome 1
1451	11356	21220	1.22	0.0E+00	D87077.1	NT	Human mRNA for KIAA0240 gene, partial cds
1454	11359	21223	4.97	0.0E+00	6912457	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
1456	11361	21225	1.51	0.0E+00	7661965	NT	Homo sapiens KIAA0170 gene product (KIAA0170), mRNA
1456	11361	21226	1.51	0.0E+00	7661965	NT	Homo sapiens KIAA0170 gene product (KIAA0170), mRNA
1457	11362		0.97	0.0E+00	Y07829.2	NT	Homo sapiens RFB30 gene for RING finger protein
1462	11367	21231	3.65	0.0E+00	M60676.1	NT	Human von Willebrand factor pseudogene corresponding to exons 23 through 34
1462	11367	21232	3.65	0.0E+00	M60676.1	NT	Human von Willebrand factor pseudogene corresponding to exons 23 through 34
1495	11399	21259	1.32	0.0E+00	7706434	NT	Homo sapiens hHDC for homolog of Drosophila headcase (LOC51696), mRNA
1509	11414	21273	0.95	0.0E+00	AA481172.1	EST_HUMAN	aa34a03.r1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE.815116 5'
1515	11420	21276	11.95	0.0E+00	AF023860.1	NT	Cercopithecus aethiops cyclophilin A mRNA, complete cds
1515	11420	21277	11.95	0.0E+00	AF023860.1	NT	Cercopithecus aethiops cyclophilin A mRNA, complete cds
1517	11422	21280	0.97	0.0E+00	D10884.1	NT	Bovine mRNA for neurocalcin
1519	11424			0.0E+00	U78027.1	NT	Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein (L44L) and FTP3 (FTP3) genes, complete cds
1520	11425	21283	3.9	0.0E+00	4505404	NT	Homo sapiens transmembrane glycoprotein (GPNMB) mRNA
1520	11425	21284	3.9	0.0E+00	4505404	NT	Homo sapiens transmembrane glycoprotein (GPNMB) mRNA
1521	11426	21285	3.12	0.0E+00	7662405	NT	Homo sapiens KIAA0957 protein (KIAA0957), mRNA
1522	11427		8.41	0.0E+00	7666972	NT	Homo sapiens TNF-inducible protein CG12-1 (CG12-1), mRNA
1527	11432	21289	5.02	0.0E+00	M98478.1	NT	Human transglutaminase mRNA, complete cds
1530	11435	21291	5.75	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
1530	11435	21292	5.75	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
1531	12697		10.12	0.0E+00	4506654	NT	Homo sapiens ribosomal protein L5 (RPL5) mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1532	11436	21293	11.11	0.0E+00	M14199.1	NT	Human laminin receptor (2H5 epitope) mRNA, 5' end
1541	11446	21306	5.81	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
1541	11446	21307	5.81	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
1543	11448	21308	12.91	0.0E+00	4503088	NT	Homo sapiens chondroitin sulfate proteoglycan 4 (melanoma-associated) (CSPG4), mRNA
1562	11467	21325	1.66	0.0E+00	Z83738.1	NT	H. sapiens H2B/e gene
1563	11468	21326	1.38	0.0E+00	5921460	NT	Homo sapiens butyrophilin, subfamily 2, member A1 (BTN2A1), mRNA
1563	11468	21327	1.38	0.0E+00	5921460	NT	Homo sapiens butyrophilin, subfamily 2, member A1 (BTN2A1), mRNA
1564	11469	21328	5.5	0.0E+00	AV690831.1	EST_HUMAN	AV690831 GKC Homo sapiens cDNA clone GKCBOF02 5'
1564	11469	21329	5.5	0.0E+00	AV690831.1	EST_HUMAN	AV690831 GKC Homo sapiens cDNA clone GKCBOF02 5'
1566	12698	21330	1.5	0.0E+00	AB040905.1	NT	Homo sapiens mRNA for KIAA1472 protein, partial cds
1570	11474	21331	0.98	0.0E+00	AF157476.1	NT	Homo sapiens DNA polymerase zeta catalytic subunit (REV3) mRNA, complete cds
1572	11476	21334	2.49	0.0E+00	7662183	NT	Homo sapiens KIAA0569 gene product (KIAA0569), mRNA
1572	11476	21335	2.49	0.0E+00	7662183	NT	Homo sapiens KIAA0569 gene product (KIAA0569), mRNA
1574	11478	21336	14.05	0.0E+00	5729876	NT	Homo sapiens heat shock 70kD protein 10 (HSC71) (HSPA10), mRNA
1574	11478	21337	14.05	0.0E+00	5729876	NT	Homo sapiens heat shock 70kD protein 10 (HSC71) (HSPA10), mRNA
1576	11480	21339	0.94	0.0E+00	M91803.1	NT	Human sodium channel mRNA
1591	11495	21355	4.67	0.0E+00	H26973.1	EST_HUMAN	yo76c05.s1 Soares adult brain N2b4-IB55Y Homo sapiens cDNA clone IMAGE:183848 3'
1602	11507	21368	1.4	0.0E+00	AB046829.1	NT	Homo sapiens mRNA for KIAA1609 protein, partial cds
1602	11507	21369	1.4	0.0E+00	AB046829.1	NT	Homo sapiens mRNA for KIAA1609 protein, partial cds
1645	11549	21410	1.27	0.0E+00	A1768104.1	EST_HUMAN	wg81b07.x1 Soares NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:2371477 3' similar to TR:Q62788 Q62788 CYS2HIS2 ZINC FINGER PROTEIN. ;
1646	11550	21411	3.33	0.0E+00	AF057177.1	NT	Homo sapiens T-cell receptor gamma V1 gene region
1650	11553	21415	1.56	0.0E+00	M29580.1	NT	Human zinc-finger protein 7 (ZFP7) mRNA, complete cds
1650	11553	21416	1.56	0.0E+00	M29580.1	NT	Human zinc-finger protein 7 (ZFP7) mRNA, complete cds
1652	11555	21418	1.22	0.0E+00	4557887	NT	Homo sapiens keratin 18 (KR18) mRNA
1653	11556	21419	0.92	0.0E+00	7657066	NT	Homo sapiens v-ets avian erythroblastosis virus E26 oncogene related (ERG), mRNA
1657	11559	21423	1.11	0.0E+00	4557610	NT	yc59e08.t1 Soares breast 3NbHbSt Homo sapiens cDNA clone IMAGE:182246 5' similar to gb:M64099
1659	11561	21426	2.99	0.0E+00	H30132.1	EST_HUMAN	GAMMA-GLUTAMYL TRANSPEPTIDASE 5 PRECURSOR (HUMAN);
1659	11561	21427	2.99	0.0E+00	H30132.1	EST_HUMAN	yc59e08.t1 Soares breast 3NbHbSt Homo sapiens cDNA clone IMAGE:182246 5' similar to gb:M64099
1661	11563	21429	1.21	0.0E+00	Z80780.1	NT	GAMMA-GLUTAMYL TRANSPEPTIDASE 5 PRECURSOR (HUMAN);
1661	11563	21430	1.21	0.0E+00	Z80780.1	NT	H. sapiens H2B/h gene
1664	11566		7.85	0.0E+00	5031748	NT	Homo sapiens high-mobility group (nonhistone chromosomal) protein 17 (HMG17), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1672	11574	21442	4.55	0.0E+00	8923841	NT	Homo sapiens FOXJ2 forkhead factor (LOC55810), mRNA
1677	11579	21448	1.02	0.0E+00	M75980.1	NT	Human hepatocyte growth factor gene, exon 15
1677	11579	21449	1.02	0.0E+00	M75980.1	NT	Human hepatocyte growth factor gene, exon 15
1680	11582	21453	1.43	0.0E+00	4826873	NT	Homo sapiens RNA binding motif protein, Y chromosome, family 1, member A1 (RBM1A1) mRNA
1685	11587	21460	2.59	0.0E+00	AB026542.1	NT	Homo sapiens WAVE2 mRNA for WASP-family protein, complete cds
1687	11589		2.6	0.0E+00	S94400.1	NT	TOR zeta [human, Genomic]mRNA, 365 nt, segment 1 of 8]
1696	12702	21472	0.87	0.0E+00	11545911	NT	Homo sapiens NOD2 protein (NOD2), mRNA
1710	11611	21481	1.75	0.0E+00	AF273841.1	NT	Homo sapiens SMCY (SMCY) gene, complete cds
1745	12703		13.81	0.0E+00	4508718	NT	Homo sapiens ribosomal protein S2 (RPS2) mRNA
1749	11649	21517	0.9	0.0E+00	4557556	NT	Homo sapiens E1A binding protein p300 (EP300) mRNA
1749	11649	21518	0.9	0.0E+00	4557556	NT	Homo sapiens E1A binding protein p300 (EP300) mRNA
1751	11651	21521	1.23	0.0E+00	U63963.1	NT	Human CSF-1 receptor (FMS) gene, complete cds, and (SMF) gene, partial cds
1754	11654		1.13	0.0E+00	W76571.1	EST_HUMAN	z66609.1 Soares_fetal_heart_NbHH19W Homo sapiens cDNA clone IMAGE:345664 5'
1755	12704	21525	3.89	0.0E+00	4505332	NT	Homo sapiens nuclear autoantigenic sperm protein (histone-binding) (NASP) mRNA
1765	11664	21538	7.25	0.0E+00	U14967.1	NT	Human ribosomal protein L21 mRNA, complete cds
1767	11666	21541	4.6	0.0E+00	AB002331.1	NT	Human mRNA for KIAA0333 gene, partial cds
1768	11667	21542	4.34	0.0E+00	4502264	NT	Homo sapiens activating transcription factor 4 (tax-responsive enhancer element B67) (ATF4) mRNA
1768	11667	21543	4.34	0.0E+00	4502264	NT	Homo sapiens activating transcription factor 4 (tax-responsive enhancer element B67) (ATF4) mRNA
1768	11667	21544	4.34	0.0E+00	4502264	NT	Homo sapiens activating transcription factor 4 (tax-responsive enhancer element B67) (ATF4) mRNA
1781	11680	21558	1.04	0.0E+00	4504626	NT	Homo sapiens immunoglobulin superfamily, member 3 (IGSF3) mRNA, and translated products
1781	11680	21559	1.04	0.0E+00	4504626	NT	Homo sapiens immunoglobulin superfamily, member 3 (IGSF3) mRNA, and translated products
1793	11691	21566	10.22	0.0E+00	6005855	NT	Homo sapiens Retina-derived POU-domain factor-1 (RPF-1), mRNA
1793	11691	21567	10.22	0.0E+00	6005855	NT	Homo sapiens Retina-derived POU-domain factor-1 (RPF-1), mRNA
1804	11701	21576	3.19	0.0E+00	4826783	NT	Homo sapiens potassium voltage-gated channel, Shab-related subfamily, member 1 (KCNB1) mRNA
1804	11701	21577	3.19	0.0E+00	4826783	NT	Homo sapiens potassium voltage-gated channel, Shab-related subfamily, member 1 (KCNB1) mRNA
1805	11702	21578	4.52	0.0E+00	U07147.1	NT	Human retinal degeneration slow (RDS) gene, exon 1
1805	11702	21579	4.52	0.0E+00	U07147.1	NT	Human retinal degeneration slow (RDS) gene, exon 1
1809	11706	21584	1.47	0.0E+00	AW207280.1	EST_HUMAN	UI-HB11-afn-f-07-0-UI.st NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2722333 3'
1809	11706	21585	1.47	0.0E+00	AW207280.1	EST_HUMAN	UI-HB11-afn-f-07-0-UI.st NCI_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2722333 3'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
1832	11729	21603	2.08	0.0E+00	BE277485.1	EST_HUMAN	601179164F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3547239 5'
1832	11729	21604	2.08	0.0E+00	BE277485.1	EST_HUMAN	601179164F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3547239 5'
1852	11748	21623	0.99	0.0E+00	BE006292.1	EST_HUMAN	RC2-BN0126-200300-012-b04 BN0126 Homo sapiens cDNA
1881	11777	21651	3.52	0.0E+00	4506384	NT	Homo sapiens RAD1 (S. pombe) homolog (RAD1) mRNA, and translated products
1881	11777	21652	3.52	0.0E+00	4506384	NT	Homo sapiens RAD1 (S. pombe) homolog (RAD1) mRNA, and translated products
1889	11785		1.65	0.0E+00	AF157478.1	NT	Homo sapiens DNA polymerase zeta catalytic subunit (REV3) mRNA, complete cds
1890	12707	21661	4.06	0.0E+00	M98478.1	NT	Human transglutaminase mRNA, complete cds
1890	12707	21662	4.06	0.0E+00	M98478.1	NT	Human transglutaminase mRNA, complete cds
1895	11790	21669	2.28	0.0E+00	4507464	NT	Homo sapiens transforming growth factor, beta 3 (TGFB3), mRNA
1895	11790	21670	2.28	0.0E+00	4507464	NT	Homo sapiens transforming growth factor, beta 3 (TGFB3), mRNA
1898	11794		5.25	0.0E+00	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
1903	11799		1.9	0.0E+00	M55632.1	NT	Human topoisomerase I pseudogene 1
1905	12708	21678	0.94	0.0E+00	5901905	NT	Homo sapiens butyrophilin, subfamily 3, member A2 (BTN3A2), mRNA
1913	11808	21685	1.97	0.0E+00	4809282	NT	Homo sapiens histidine ammonia-lyase (HAL) mRNA
1913	11808	21686	1.97	0.0E+00	4809282	NT	Homo sapiens histidine ammonia-lyase (HAL) mRNA
1924	11819		1.12	0.0E+00	AL163252.2	NT	Homo sapiens chromosome 21 segment HS21C052
1926	11821	21700	1.15	0.0E+00	8400716	NT	Homo sapiens nebulin (NEB), mRNA
1926	11821	21701	1.15	0.0E+00	8400716	NT	Homo sapiens nebulin (NEB), mRNA
1927	11822	21702	8.13	0.0E+00	4826638	NT	Homo sapiens actinin, alpha 4 (ACTN4) mRNA
1927	11822	21703	8.13	0.0E+00	4826638	NT	Homo sapiens actinin, alpha 4 (ACTN4) mRNA
1937	11832	21715	1.21	0.0E+00	AB018333.1	NT	Homo sapiens mRNA for KIAA0790 protein, partial cds
1937	11832	21716	1.21	0.0E+00	AB018333.1	NT	Homo sapiens mRNA for KIAA0790 protein, partial cds
1943	11838	21720	2.01	0.0E+00	M33782.1	NT	Human TFEB protein mRNA, partial cds
1943	11838	21721	2.01	0.0E+00	M33782.1	NT	Human TFEB protein mRNA, partial cds
1945	11840	21722	1.33	0.0E+00	AW193024.1	EST_HUMAN	x695b01.x1 NCI CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2679913 3'
1945	11840	21723	1.33	0.0E+00	AW193024.1	EST_HUMAN	x695b01.x1 NCI CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2679913 3'
1946	11841	21724	8.4	0.0E+00	6912457	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
1946	11841	21725	8.4	0.0E+00	6912457	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
1948	11843	21727	0.92	0.0E+00	Z47556.1	NT	H.sapiens genes for semenogelin I and semenogelin II
1948	11843	21728	0.92	0.0E+00	Z47556.1	NT	H.sapiens genes for semenogelin I and semenogelin II
1955	11850	21737	2.31	0.0E+00	AB040946.1	NT	Homo sapiens mRNA for KIAA1613 protein, partial cds
1975	11868	21759	0.86	0.0E+00	AF273841.1	NT	Homo sapiens SMCY (SMCY) gene, complete cds
1975	11868	21760	0.86	0.0E+00	AF273841.1	NT	Homo sapiens SMCY (SMCY) gene, complete cds

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2011	11903	21793	1.09	0.0E+00	BE743215.1	EST_HUMAN	601573895F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3835198 5'
2011	11903	21794	1.09	0.0E+00	BE743215.1	EST_HUMAN	601573895F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3835198 5'
2013	11905	21795	0.96	0.0E+00	4503648	NT	Homo sapiens coagulation factor IX (plasma thromboplastic component, Christmas disease, hemophilia B) (F9) mRNA
2014	11906	21796	5.46	0.0E+00	AU140831.1	EST_HUMAN	AU140831 PLACE4 Homo sapiens cDNA clone PLACE4000321 5'
2015	11314	21177	1.01	0.0E+00	7705585	NT	Homo sapiens KIAA1114 protein (KIAA1114), mRNA
2015	11314	21178	1.01	0.0E+00	7705585	NT	Homo sapiens KIAA1114 protein (KIAA1114), mRNA
2017	11908	21798	1.95	0.0E+00	AA077589.1	EST_HUMAN	7B22E10 Chromosome 7 Fetal Brain cDNA Library Homo sapiens cDNA clone 7B22E10
2017	11908	21799	1.95	0.0E+00	AA077589.1	EST_HUMAN	7B22E10 Chromosome 7 Fetal Brain cDNA Library Homo sapiens cDNA clone 7B22E10
2019	11910		2.34	0.0E+00	7657468	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
2021	11912		1.6	0.0E+00	4585863	NT	Homo sapiens phosphodiesterase 6A, cGMP-specific, rod, alpha (PDE6A), mRNA
2022	11913	21802	0.92	0.0E+00	Z42399.1	EST_HUMAN	HSC01C021 normalized infant brain cDNA Homo sapiens cDNA clone c-01c02
2024	11915		1.94	0.0E+00	A1244247.1	EST_HUMAN	q90f08.x1 NCI_CGAP_U2 Homo sapiens cDNA clone IMAGE:1988871 3' similar to contains Alu repetitive element
2029	11920	21811	2.59	0.0E+00	BE877225.1	EST_HUMAN	601485146F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3887747 5'
2031	11922	21813	1.5	0.0E+00	BF315325.1	EST_HUMAN	601902604F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4135320 5'
2031	11922	21814	1.5	0.0E+00	BF315325.1	EST_HUMAN	601902604F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4135320 5'
2035	11926	21819	2.42	0.0E+00	BE697125.1	EST_HUMAN	RC3-CT0413-270700-022-d10 CT0413 Homo sapiens cDNA
2035	11926	21820	2.42	0.0E+00	BE697125.1	EST_HUMAN	RC3-CT0413-270700-022-d10 CT0413 Homo sapiens cDNA
2040	11931	21826	2.53	0.0E+00	L00620.1	NT	Human plasma membrane calcium ATPase isoform 2 (APT2B2) mRNA, complete cds
2040	11931	21827	2.53	0.0E+00	L00620.1	NT	Human plasma membrane calcium ATPase isoform 2 (APT2B2) mRNA, complete cds
2045	11936	21831	1.32	0.0E+00	4758489	NT	Homo sapiens GTP binding protein 1 (GTPBP1) mRNA
2067	11957		2.63	0.0E+00	BE767994.1	EST_HUMAN	QV1-GN0065-140800-318-c10 GN0065 Homo sapiens cDNA
2068	11958		1.13	0.0E+00	AF018983.1	NT	Homo sapiens X-linked juvenile retinoschisis protein (XLR51) gene, exon 6 and complete cds
2070	11960	21854	3.09	0.0E+00	BF027562.1	EST_HUMAN	601672066F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3954785 5'
2071	11961	21855	2	0.0E+00	4503756	NT	Homo sapiens flavin containing monooxygenase 2 (FMO2) mRNA
2073	11963	21856	0.99	0.0E+00	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
2074	11964	21857	1.16	0.0E+00	AW752708.1	EST_HUMAN	IL3-CT0219-271099-022-G10 CT0219 Homo sapiens cDNA
2076	11966	21859	1.96	0.0E+00	A1904640.1	EST_HUMAN	QV-BT065-020399-092 BT065 Homo sapiens cDNA
2076	11966	21860	1.96	0.0E+00	A1904640.1	EST_HUMAN	QV-BT065-020399-092 BT065 Homo sapiens cDNA
2112	12001		1.19	0.0E+00	7657252	NT	Homo sapiens potassium large conductance calcium-activated channel, subfamily M, beta member 3-like (KCNMB3L), mRNA
2132	12020		1.6	0.0E+00	L14787.1	NT	Human DNA-binding protein mRNA, 3'end

Table 4

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2138	12026	21922	1.02	0.0E+00	BE274696.1	EST_HUMAN	601122338F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:3346688 5'
2140	12028	21925	1.09	0.0E+00	D87685.1	NT	Human mRNA for KIAA0244 gene, partial cds
2141	12029	21926	10.46	0.0E+00	AV738288.1	EST_HUMAN	AV738288 CB Homo sapiens cDNA clone CBNBDE08 5'
2141	12029	21927	10.46	0.0E+00	AV738288.1	EST_HUMAN	AV738288 CB Homo sapiens cDNA clone CBNBDE08 5'
2143	12031	21929	1.4	0.0E+00	AA931691.1	EST_HUMAN	cc32e01.s1 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1567896 3'
2145	12033		0.9	0.0E+00	M19828.1	NT	Human apolipoprotein B-100 (apoB) gene, exons 22 through 29
2148	12036	21933	17.1	0.0E+00	BF344434.1	EST_HUMAN	602014829F1 NCI_CGAP_Bm54 Homo sapiens cDNA clone IMAGE:4150734 5'
2149	12037	21934	11.29	0.0E+00	BE748696.1	EST_HUMAN	601572186T1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:3839012 3'
2152	12040	21937	2.35	0.0E+00	BF377897.1	EST_HUMAN	CM1-TN0141-250900-439-508 TN0141 Homo sapiens cDNA
2152	12040	21938	2.35	0.0E+00	BF377897.1	EST_HUMAN	CM1-TN0141-250900-439-508 TN0141 Homo sapiens cDNA
2156	12714	21943	1.77	0.0E+00	BF313617.1	EST_HUMAN	601900261F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4129622 5'
2159	12046	21946	1.92	0.0E+00	BE018750.1	EST_HUMAN	bb4e02.y1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3049082 5' similar to TR:Q15170 Q15170 TRANSCRIPTION FACTOR S-II-RELATED PROTEIN;
2160	12047	21947	0.92	0.0E+00	AA042813.1	EST_HUMAN	zk53c07.s1 Soares_pregnant_uterus_Nb-IPU Homo sapiens cDNA clone IMAGE:486540 3' similar to gb:X65857_cds1 OLFACTORY RECEPTOR-LIKE PROTEIN HGMP07E (HUMAN);
2160	12047	21948	0.92	0.0E+00	AA042813.1	EST_HUMAN	zk53c07.s1 Soares_pregnant_uterus_Nb-IPU Homo sapiens cDNA clone IMAGE:486540 3' similar to gb:X65857_cds1 OLFACTORY RECEPTOR-LIKE PROTEIN HGMP07E (HUMAN);
2168	12055	21956	2.32	0.0E+00	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
2168	12055	21957	2.32	0.0E+00	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
2169	12056	21958	2.63	0.0E+00	7662401	NT	Homo sapiens KIAA0952 protein (KIAA0952), mRNA
2169	12056	21959	2.63	0.0E+00	7662401	NT	Homo sapiens KIAA0952 protein (KIAA0952), mRNA
2174	12061		1.04	0.0E+00	U36264.1	NT	Human beta-prime-adaptin (BAM22) gene, exon 16
2193	12080	21984	7.56	0.0E+00	4557566	NT	Homo sapiens E1A binding protein p300 (EP300) mRNA
2199	12086	21988	1.44	0.0E+00	7662401	NT	Homo sapiens KIAA0952 protein (KIAA0952), mRNA
2206	12093	21996	1.09	0.0E+00	BE895281.1	EST_HUMAN	601433525F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3918607 5'
2209	12096	21999	0.87	0.0E+00	BE905583.1	EST_HUMAN	601495208F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3897457 5'
2209	12096	22000	0.87	0.0E+00	BE905583.1	EST_HUMAN	601495208F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3897457 5'
2212	12098	22002	1.36	0.0E+00	AB037794.1	NT	Homo sapiens mRNA for KIAA1363 protein, partial cds
2253	12137	22034	4.16	0.0E+00	11545748	NT	Homo sapiens differentially expressed in FDCP (mouse homolog) 6 (DEF6), mRNA
2253	12137	22035	4.16	0.0E+00	11545748	NT	Homo sapiens differentially expressed in FDCP (mouse homolog) 6 (DEF6), mRNA
2254	12138	22036	2.51	0.0E+00	A1076404.1	EST_HUMAN	oz09c07.x1 Soares_fetal_liver_spleen_1NFLS_S1 Homo sapiens cDNA clone IMAGE:1074628 3'
2256	12140	22038	2.21	0.0E+00	AA429001.1	EST_HUMAN	zv78a11.r1 Soares_fetal_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:769740 5'
2256	12140	22039	2.21	0.0E+00	AA429001.1	EST_HUMAN	zv78a11.r1 Soares_fetal_fetus_Nb2HF8_9w Homo sapiens cDNA clone IMAGE:769740 5'
2258	12142	22041	2.23	0.0E+00	BF347039.1	EST_HUMAN	602021846F1 NCI_CGAP_Bm57 Homo sapiens cDNA clone IMAGE:4157339 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2263	12147	22047	1.19	0.0E+00	L02840.1	NT	Homo sapiens potassium channel Kv2.1 mRNA, complete cds
2264	12148	22048	2.03	0.0E+00	63254466	NT	Homo sapiens flavin containing monooxygenase 3 (FMO3), mRNA
2271	12155	22054	1	0.0E+00	BE676095.1	EST_HUMAN	KIAA0857 PROTEIN ;
2274	12158	22056	10.08	0.0E+00	AF044571.1	NT	Homo sapiens phosphotyrosine kinase alpha subunit (PHKA2) gene, exon 32
2275	12159	22057	2.72	0.0E+00	AI625542.1	EST_HUMAN	U57008.x1 NCL_CGAP_U12 Homo sapiens cDNA clone IMAGE:2283182 3'
2280	12164	22061	1.76	0.0E+00	5803178	NT	Homo sapiens sperm specific antigen 2 (SSFA2), mRNA
2280	12164	22062	1.76	0.0E+00	5803178	NT	Homo sapiens sperm specific antigen 2 (SSFA2), mRNA
2291	12173	22072	4.26	0.0E+00	AF058332.1	NT	Homo sapiens titin (TTN) gene, alternative splice products, partial cds
2291	12173	22073	4.26	0.0E+00	AF058332.1	NT	Homo sapiens titin (TTN) gene, alternative splice products, partial cds
2300	12182	22079	2.88	0.0E+00	5174678	NT	Homo sapiens signal regulatory protein, beta, 1 (SIRP-BETA-1) mRNA
2304	12185	22083	1.75	0.0E+00	AU131142.1	EST_HUMAN	AU131142 NT2RP3 Homo sapiens cDNA clone NT2RP3002084 5'
2305	12186	22084	5.71	0.0E+00	BE794026.1	EST_HUMAN	601586843F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3941003 5'
2306	12187	22084	0.98	0.0E+00	AW867076.1	EST_HUMAN	MR1-SN0033-120400-002-a04 SN0033 Homo sapiens cDNA
2307	12188	22085	1.97	0.0E+00	7652017	NT	Homo sapiens KIAA0244 protein (KIAA0244), mRNA
2308	12189	22086	1.44	0.0E+00	4758407	NT	Homo sapiens hexose-6-phosphate dehydrogenase (glucose 1-dehydrogenase) (H6PD), mRNA
2308	12189	22087	1.44	0.0E+00	4758407	NT	Homo sapiens hexose-6-phosphate dehydrogenase (glucose 1-dehydrogenase) (H6PD), mRNA
2309	12190						Homo sapiens cytochrome P450 polypeptide 43 (CYP3A43) gene, partial cds; cytochrome P450 polypeptide 4 (CYP3A4) and cytochrome P450 polypeptide 7 (CYP3A7) genes, complete cds; and cytochrome P450 polypeptide 5 (CYP3A5) gene, partial cds
2310	12191	22088	2.31	0.0E+00	AF280107.1	NT	
2310	12191	22089	7.57	0.0E+00	AU118082.1	EST_HUMAN	AU118082 HEMBA1 Homo sapiens cDNA clone HEMBA1002839 5'
2310	12191	22089	7.57	0.0E+00	AU118082.1	EST_HUMAN	AU118082 HEMBA1 Homo sapiens cDNA clone HEMBA1002839 5'
2310	12191	22090	7.57	0.0E+00	AU118082.1	EST_HUMAN	AU118082 HEMBA1 Homo sapiens cDNA clone HEMBA1002839 5'
2327	12208		0.96	0.0E+00	BE814424.1	EST_HUMAN	MR0-BN0070-090000-029-d12 BN0070 Homo sapiens cDNA
2363	12243	22138	1.34	0.0E+00	AU119582.1	EST_HUMAN	AU119582 HEMBA1 Homo sapiens cDNA clone HEMBA1006155 5'
2366	12246		3.64	0.0E+00	AI042035.1	EST_HUMAN	ox60b02.x1 Soares_NHIMPu_S1 Homo sapiens cDNA clone IMAGE:1660683 3' similar to TR:O08662
2369	12249	22141	0.98	0.0E+00	AW303998.1	EST_HUMAN	008662 230KDA PHOSPHATIDYLINOSITOL 4-KINASE ;
2371	12251		2.03	0.0E+00	BE895605.1	EST_HUMAN	xv15f07.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2813221 3' similar to TR:O54924
2382	12262		1.69	0.0E+00	AB005622.1	EST_HUMAN	O54924 EX084 ;
2386	12265	22158	5.63	0.0E+00	6006002	NT	601432608F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3918168 5'
2390	12268	22162	2.48	0.0E+00	D85606.1	NT	AB005622 HeLa cDNA (T.Norma) Homo sapiens cDNA similar to adenylate kinase isozyme 2
2390	12268	22163	2.48	0.0E+00	D85606.1	NT	Homo sapiens glutamate receptor, ionotropic, N-methyl D-aspartate 2A (GRIN2A) mRNA
2390	12268	22163	2.48	0.0E+00	D85606.1	NT	Homo sapiens gene for cholecystokinin type-A receptor, complete cds
2390	12268	22163	2.48	0.0E+00	D85606.1	NT	Homo sapiens gene for cholecystokinin type-A receptor, complete cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2398	12276	22172	2.28	0.0E+00	AF106275.1	NT	Homo sapiens immunoglobulin-like transcript 1c variant 4 (LT1c) gene, exon 6
2402	12279	22176	0.98	0.0E+00	BF345274.1	EST_HUMAN	602018058F1 NCI CGAP Brn67 Homo sapiens cDNA clone IMAGE:4153670 5'
2410	12287	22185	3.95	0.0E+00	5729777	NT	Homo sapiens collagen, type XII, alpha 1 (COL12A1), mRNA
2414	12291	22188	0.87	0.0E+00	BE831003.1	EST_HUMAN	CMD-MT0033-150600-428-h11 MT0033 Homo sapiens cDNA
2414	12291	22189	0.87	0.0E+00	BE831003.1	EST_HUMAN	CMD-MT0033-150600-428-h11 MT0033 Homo sapiens cDNA
2419	12296	22193	2.27	0.0E+00	BF599144.1	EST_HUMAN	602184558T1 NIH_MGC_42 Homo sapiens cDNA clone IMAGE:4300383 3'
2428	12305	22201	2.66	0.0E+00	AW465922.1	EST_HUMAN	ha04h04.x1 NCI CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2872759 3'
2430	12307	22202	3.45	0.0E+00	AW501010.1	EST_HUMAN	UI-HF-BPOp-als-c-07-Q-UI.1 NIH_MGC_51 Homo sapiens cDNA clone IMAGE:3072780 5'
2444	12321	22219	2.08	0.0E+00	5453965	NT	Homo sapiens protein kinase, AMP-activated, alpha 2 catalytic subunit (PRKAA2) mRNA
2444	12321	22220	2.08	0.0E+00	5453965	NT	Homo sapiens protein kinase, AMP-activated, alpha 2 catalytic subunit (PRKAA2) mRNA
2457	12334		2.35	0.0E+00	AW813853.1	EST_HUMAN	RC3-ST0197-300300-016-c04 ST0197 Homo sapiens cDNA
2462	12339	22233	16.13	0.0E+00	BE795542.1	EST_HUMAN	601592530F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3948518 5'
2463	11792	21671	1.18	0.0E+00	7657038	NT	Homo sapiens death receptor 6 (DR6), mRNA
2464	12340	22234	1.8	0.0E+00	BF509482.1	EST_HUMAN	UI-H-B14-aoz-b-08-Q-UI.s1 NCI CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3086535 3'
2467	12343	22236	2.25	0.0E+00	Z32684.2	NT	Homo sapiens mRNA for membrane transport protein (XK gene)
2469	12345		5.57	0.0E+00	5453971	NT	Homo sapiens platelet-derived growth factor receptor-like (PDGFR_L) mRNA
2471	12347	22239	1.99	0.0E+00	BE910378.1	EST_HUMAN	601503350F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3905148 5'
2472	12348	22240	1.96	0.0E+00	7657468	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
2473	12349	22241	55.78	0.0E+00	BE150865.1	EST_HUMAN	RC4-HT0276-160200-013-d05 HT0276 Homo sapiens cDNA
2474	12350	22242	1.14	0.0E+00	8923340	NT	Homo sapiens hypothetical protein FLJ20366 (FLJ20366), mRNA
2475	12351	22243	3.21	0.0E+00	U93239.1	NT	Human Sec62 (Sec62) mRNA, complete cds
2481	12357	22249	1.64	0.0E+00	BE886490.1	EST_HUMAN	601508211F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3909866 5'
2486	12361	22255	4.39	0.0E+00	BE875511.1	EST_HUMAN	601489241F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3991371 5'
2486	12361	22256	4.39	0.0E+00	BE875511.1	EST_HUMAN	601489241F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3991371 5'
2488	12363	22259	0.97	0.0E+00	AF245505.1	NT	Homo sapiens adiclen mRNA, complete cds
2504	12379	22267	1.27	0.0E+00	BE536921.1	EST_HUMAN	601064738F1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:3451161 5'
2509	12383	22274	3.8	0.0E+00	AU143277.1	EST_HUMAN	AU143277 Y79AA1 Homo sapiens cDNA clone Y79AA1001673 5'
2509	12383	22275	3.8	0.0E+00	AU143277.1	EST_HUMAN	AU143277 Y79AA1 Homo sapiens cDNA clone Y79AA1001673 5'
2510	12384	22276	1.19	0.0E+00	BE292896.1	EST_HUMAN	601108312F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2987955 5'
2510	12384	22277	1.19	0.0E+00	BE292896.1	EST_HUMAN	601108312F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2987955 5'
2511	12385	22278	0.99	0.0E+00	BF223041.1	EST_HUMAN	7q27h12.x1 NCI CGAP_GC6 Homo sapiens cDNA clone IMAGE:3' similar to TR:O00246 O00246
2514	12388	22280	7.65	0.0E+00	AF245505.1	NT	HYPOTHETICAL 9.3 KD PROTEIN ;
2540	12414	22304	1.05	0.0E+00	BE296613.1	EST_HUMAN	Homo sapiens adiclen mRNA, complete cds
							601173631F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3529159 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2553	12654	22318	2.37	0.0E+00	AB037836.1	NT	Homo sapiens mRNA for KIAA1415 protein, partial cds
2553	12654	22319	2.37	0.0E+00	AB037836.1	NT	Homo sapiens mRNA for KIAA1415 protein, partial cds
2554	12426		3.85	0.0E+00	BF513835.1	EST_HUMAN	U1H-BW1-amp-f-12-0-U1.s1 NCL_CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3070631 3'
2560	12432	22325	2.8	0.0E+00	BF672818.1	EST_HUMAN	602152653F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4203612 5'
2562	12434		1.16	0.0E+00	BE616995.1	EST_HUMAN	601279873F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3621786 5'
2569	12440	22332	1.34	0.0E+00	AB037742.1	NT	Homo sapiens mRNA for KIAA1321 protein, partial cds
2570	12441	22333	0.97	0.0E+00	AI571737.1	EST_HUMAN	tn19b08.x1 NCL_CGAP_Brn25 Homo sapiens cDNA clone IMAGE:2168055 3' similar to gb.L20977 CALCIUM-TRANSPORTING ATPASE PLASMA MEMBRANE, BRAIN ISOFORM 2 (HUMAN);
2571	12442	22334	2.27	0.0E+00	5032150	NT	Homo sapiens TATA box binding protein (TBP)-associated factor, RNA polymerase II, 28kD (TAF2I) mRNA
2573	12444	22336	5.78	0.0E+00	AB037859.1	NT	Homo sapiens mRNA for KIAA1438 protein, partial cds
2574	12445	22337	1.03	0.0E+00	BE795445.1	EST_HUMAN	601590108F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3944304 5'
2574	12445	22338	1.03	0.0E+00	BE795445.1	EST_HUMAN	601590108F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3944304 5'
2577	12448	22339	1.1	0.0E+00	BE293328.1	EST_HUMAN	601143722F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3061389 5'
2585	12456		10.42	0.0E+00	BE792472.1	EST_HUMAN	601584930F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3939222 5'
2595	12465	22358	2.46	0.0E+00	4504686	NT	Homo sapiens IMP (inosine monophosphate) dehydrogenase 1 (IMPDH1) mRNA
2601	12727	22365	7.02	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
2608	12476		1.09	0.0E+00	U78027.1	NT	Homo sapiens Bruton's tyrosine kinase (BTK), alpha-D-galactosidase A (GLA), L44-like ribosomal protein (L44L) and FTP3 (FTP3) genes, complete cds
2609	12477	22369	5.19	0.0E+00	AF173227.1	NT	Homo sapiens guanylate cyclase-activating protein 2 (GUCA1B) gene, exon 1
2613	12481	22370	1.17	0.0E+00	AB011108.1	NT	Homo sapiens mRNA for KIAA0536 protein, partial cds
2616	12484	22373	0.98	0.0E+00	AU133385.1	EST_HUMAN	AU133385 NT2RP4 Homo sapiens cDNA clone NT2RP4001964 5'
2617	12485	22374	1.41	0.0E+00	M69225.1	NT	Human bullous pemphigoid antigen (BPAG1) mRNA, complete cds
2619	12487	22376	1.21	0.0E+00	AU130403.1	EST_HUMAN	AU130403 NT2RP3 Homo sapiens cDNA clone NT2RP3000779 5'
2619	12487	22377	1.21	0.0E+00	AU130403.1	EST_HUMAN	AU130403 NT2RP3 Homo sapiens cDNA clone NT2RP3000779 5'
2622	12490	22380	1.29	0.0E+00	AW887015.1	EST_HUMAN	RC1-OT0086-220300-071-007 OT0086 Homo sapiens cDNA
2626	12494	22385	1	0.0E+00	BF000018.1	EST_HUMAN	7h15h05.x1 NCL_CGAP_Co16 Homo sapiens cDNA clone IMAGE:3316089 3'
2627	12495	22386	3.25	0.0E+00	BE383165.1	EST_HUMAN	601298714F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3628923 5'
2628	12496		2.74	0.0E+00	BE531263.1	EST_HUMAN	601278373F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3610267 5'
2656	12523	22413	1.74	0.0E+00	8922843	NT	Homo sapiens hypothetical protein FLJ11052 (FLJ11052), mRNA
2690	12555		8.72	0.0E+00	AA316723.1	EST_HUMAN	EST188414 HCC cell line (matlasi to liver in mouse) II Homo sapiens cDNA 5' end similar to ribosomal protein L29
2691	12556	22443	0.88	0.0E+00	BE794884.1	EST_HUMAN	601589625F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3943591 5'
2698	12562	22452	3.59	0.0E+00	U36253.1	NT	Human beta-prime-adaptin (BAM22) gene, exon 5

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2700	12564	22454	1.08	0.0E+00	769517	NT	Homo sapiens neuregulin 1 (NRG1), transcript variant SMDF, mRNA
2701	12565	22455	10.23	0.0E+00	AF110763.1	NT	Homo sapiens skeletal muscle LIM-protein 1 (FHL-1) gene, complete cds
2708	12571	22462	10.37	0.0E+00	BE796376.1	EST_HUMAN	601591991F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3945983 5'
2709	12572	22463	3.2	0.0E+00	BF680632.1	EST_HUMAN	602155923F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4297132 5'
2712	12731	22467	13.51	0.0E+00	BE563433.1	EST_HUMAN	601335485F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3689564 5'
2713	12575		1.28	0.0E+00	AV721647.1	EST_HUMAN	AV721647 HTB Homo sapiens cDNA clone HTBBYE09 5'
2715	12577	22470	2.17	0.0E+00	5174486	NT	Homo sapiens spermatogenesis associated PD1 (KIAA0757) mRNA
2715	12577	22471	2.17	0.0E+00	5174486	NT	Homo sapiens spermatogenesis associated PD1 (KIAA0757) mRNA
2716	12578	22472	0.9	0.0E+00	8923441	NT	Homo sapiens hypothetical protein FLJ20477 (FLJ20477), mRNA
2716	12578	22473	0.9	0.0E+00	8923441	NT	Homo sapiens hypothetical protein FLJ20477 (FLJ20477), mRNA
2717	12579	22474	2.2	0.0E+00	AF290195.1	NT	Homo sapiens hypertension-related calcium-regulated gene mRNA, complete cds
2718	12580		15.67	0.0E+00	AV651066.1	EST_HUMAN	AV651066 GLC Homo sapiens cDNA clone GLCCLD07 3'
2719	12581	22475	1.72	0.0E+00	BF377897.1	EST_HUMAN	CM1-TN0141-250900-439-b08 TN0141 Homo sapiens cDNA
2719	12581	22476	1.72	0.0E+00	BF377897.1	EST_HUMAN	CM1-TN0141-250900-439-b08 TN0141 Homo sapiens cDNA
2723	12585	22479	3.21	0.0E+00	4757983	NT	Homo sapiens cerebellar degeneration-related protein (34kD) (CDR1) mRNA
2723	12585	22480	3.21	0.0E+00	4757983	NT	Homo sapiens cerebellar degeneration-related protein (34kD) (CDR1) mRNA
2727	12589	22485	2.2	0.0E+00	BE747193.1	EST_HUMAN	601580903F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3929472 5'
2730	12592	22488	0.97	0.0E+00	BE176836.1	EST_HUMAN	RC4-HT0587-170300-012-d11 HT0587 Homo sapiens cDNA
2741	12603		1.3	0.0E+00	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
2742	12604	22498	3.47	0.0E+00	BF514110.1	EST_HUMAN	UI-HBW1-armw-e-07-0-UI.s1 NCI CGAP_Sub7 Homo sapiens cDNA clone IMAGE:3071340 3'
2748	12610		1.07	0.0E+00	4503098	NT	Homo sapiens chondroitin sulfate proteoglycan 4 (melanoma-associated) (CSPG4), mRNA
2754	12616	22507	4.95	0.0E+00	BF677694.1	EST_HUMAN	602085579F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4249915 5'
2768	12620	22513	1.73	0.0E+00	7427522	NT	Homo sapiens protein tyrosine phosphatase, receptor type, T (PTPRT), mRNA
2761	12623	22515	9.56	0.0E+00	AV725534.1	EST_HUMAN	AV725534 HTG Homo sapiens cDNA clone HTGCCA03 5'
2761	12623	22516	9.56	0.0E+00	AV725534.1	EST_HUMAN	AV725534 HTG Homo sapiens cDNA clone HTGCCA03 5'
2763	12625		11.15	0.0E+00	A879163.1	EST_HUMAN	au55d04.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2618663 5' similar to
2766	12628	22521	1.97	0.0E+00	BF530651.1	EST_HUMAN	SW:R13A_HUMAN P40429 60S RIBOSOMAL PROTEIN L13A
2767	12629	22522	2.91	0.0E+00	BE872768.1	EST_HUMAN	602071957F1 NCI CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4214679 5'
2769	12631	22523	1.11	0.0E+00	AU131494.1	EST_HUMAN	601450912F1 NIH_MGC_65 Homo sapiens cDNA clone IMAGE:3854642 5'
2769	12631	22524	1.11	0.0E+00	AU131494.1	EST_HUMAN	AU131494 NT2RP3 Homo sapiens cDNA clone NT2RP3002672 5'
2770	12632	22525	10.1	0.0E+00	BE300344.1	EST_HUMAN	AU131494 NT2RP3 Homo sapiens cDNA clone NT2RP3002672 5'
2770	12632	22526	10.1	0.0E+00	BE300344.1	EST_HUMAN	600944794F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2960806 5'
2775	10151	19966	4.6	0.0E+00	S76830.1	NT	600944794F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:2960806 5' glycoprotein D=Duffy group antigen [human, blood, Genomic DNA, 3068 nt]

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2778	12638		1.94	0.0E+00	AB033281.1	NT	Homo sapiens BTRCP2 mRNA for F-box and WD-repeats protein isoform C, complete cds
2784	10649	20479	1.37	0.0E+00	AF264750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
2784	10649	20480	1.37	0.0E+00	AF264750.1	NT	Homo sapiens ALR-like protein mRNA, partial cds
2789	10941	20784	3.58	0.0E+00	4503202	NT	Homo sapiens cytochrome P450, subfamily I (dioxin-inducible), polypeptide 1 (glaucoma 3, primary infantile) (CYP1B1) mRNA
2789	10941	20785	3.58	0.0E+00	4503202	NT	Homo sapiens cytochrome P450, subfamily I (dioxin-inducible), polypeptide 1 (glaucoma 3, primary infantile) (CYP1B1) mRNA
2805	12735	22534	2.39	0.0E+00	X85980.1	NT	H. sapiens serine hydroxymethyltransferase pseudogene
2806	12736		1.27	0.0E+00	AF088624.1	NT	Homo sapiens 5-aminolevulinic synthase 2 (ALAS2) gene, complete cds
2808	12738		1.1	0.0E+00	AB040960.1	NT	Homo sapiens mRNA for KIAA1527 protein, partial cds
2814	12743		1.07	0.0E+00	AJ238852.1	NT	Homo sapiens partial rpl3 gene for ribosomal protein L3, U82 snoRNA, U83a snoRNA and U83b snoRNA genes
2815	12744	22538	2.24	0.0E+00	AL163201.2	NT	Homo sapiens chromosome 21 segment HS21C001
2819	12748	22541	5.94	0.0E+00	M80902.1	NT	Human AHNK nucleoprotein mRNA, 5' end
2822	12751	22543	1.58	0.0E+00	BE154504.1	EST_HUMAN	PM0-HT0343-281299-003-e02 HT0343 Homo sapiens cDNA
2822	12751	22544	1.58	0.0E+00	BE154504.1	EST_HUMAN	PM0-HT0343-281299-003-e02 HT0343 Homo sapiens cDNA
2824	12753		1.38	0.0E+00	X73428.1	NT	H. sapiens Id3 gene for HLH type transcription factor
2826	12755		2.84	0.0E+00	AL163208.2	NT	Homo sapiens chromosome 21 segment HS21C068
2828	12757	22547	2.58	0.0E+00	M98478.1	NT	Human transglutaminase mRNA, complete cds
2833	12761	22551	43.46	0.0E+00	D50657.1	NT	Homo sapiens gamma-cytoplasmic actin (ACTGP3) pseudogene
2833	12761	22552	43.46	0.0E+00	D50657.1	NT	Homo sapiens gamma-cytoplasmic actin (ACTGP3) pseudogene
2837	12765	22555	1.34	0.0E+00	AL056857.1	NT	Novel human mRNA from chromosome 1, which has similarities to BAT2 genes
2839	12766		4.62	0.0E+00	Y10658.1	NT	H. sapiens mRNA for nuclear DNA helicase II
2839	12767		0.96	0.0E+00	AF152303.1	NT	Homo sapiens protocadherin alpha C1 (PCDH-alpha-C1) mRNA, complete cds
2840	12768	22556	25.08	0.0E+00	4503470	NT	Homo sapiens eukaryotic translation elongation factor 1 alpha 1 (EEF1A1) mRNA
2840	12768	22557	25.08	0.0E+00	4503470	NT	Homo sapiens eukaryotic translation elongation factor 1 alpha 1 (EEF1A1) mRNA
2851	12779	22568	2.42	0.0E+00	4507280	NT	Homo sapiens serine/threonine kinase 9 (STK9) mRNA
2854	12782	22572	1.35	0.0E+00	AL047599.1	EST_HUMAN	DKFZp586G0621_r1 586 (synonym: huter1) Homo sapiens cDNA clone DKFZp586G0621
2855	12783	22573	1.25	0.0E+00	7661883	NT	Homo sapiens KIAA0054 gene product; Helicase (KIAA0054), mRNA
2855	12783	22574	1.25	0.0E+00	7661883	NT	Homo sapiens KIAA0054 gene product; Helicase (KIAA0054), mRNA
2856	12784		3.42	0.0E+00	4503098	NT	Homo sapiens chondroitin sulfate proteoglycan 4 (melanoma-associated) (CSPG4), mRNA
2858	12786	22576	4.95	0.0E+00	BE081896.1	EST_HUMAN	QV2-BT0636-130400-138-h03 BT0636 Homo sapiens cDNA
2858	12786	22577	4.95	0.0E+00	BE081896.1	EST_HUMAN	QV2-BT0636-130400-138-h03 BT0636 Homo sapiens cDNA
2866	12794	22588	1.64	0.0E+00	AL163206.2	NT	Homo sapiens chromosome 21 segment HS21C006

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2866	12794	22689	1.64	0.0E+00	AL163206.2	NT	Homo sapiens chromosome 21 segment HS21C006
2867	12795	22690	1.08	0.0E+00	AA215579.1	EST_HUMAN	zr96b11.s1 NCL_CGAP_GCB1 Homo sapiens cDNA clone IMAGE:683517 3' similar to contains Alu repetitive element;
2874	12801		3.09	0.0E+00	Y19210.1	NT	Homo sapiens hrb5 gene for hair keratin, exons 1 to 9
2877	12804	22599	1.16	0.0E+00	4758279	NT	Homo sapiens EphA4 (EPHA4) mRNA
2878	12805	22600	18.66	0.0E+00	4503470	NT	Homo sapiens eukaryotic translation elongation factor 1 alpha 1 (EEF1A1) mRNA
2879	12806	22601	1.25	0.0E+00	AI561002.1	EST_HUMAN	tn18d07.x1 NCL_CGAP_Brn25 Homo sapiens cDNA clone IMAGE:2167981 3' similar to TR:O16247
2879	12806	22602	1.25	0.0E+00	AI561002.1	EST_HUMAN	tn18d07.x1 NCL_CGAP_Brn25 Homo sapiens cDNA clone IMAGE:2167981 3' similar to TR:O16247
2881	12808	22604	1.87	0.0E+00	P52740	SWISSPROT	O16247 F44E7.2 PROTEIN.;
2882	12809	22605	1.5	0.0E+00	AF152338.1	NT	ZINC FINGER PROTEIN 132
2897	12824	22617	1.34	0.0E+00	AB033093.1	NT	Homo sapiens probocadherin gamma C4 (PCDH-gamma-C4) mRNA, complete cds
2897	12824	22618	1.34	0.0E+00	AB033093.1	NT	Homo sapiens mRNA for KIAA1267 protein, partial cds
2898	12825	22619	4.98	0.0E+00	AB040941.1	NT	Homo sapiens mRNA for KIAA1267 protein, partial cds
2898	12825	22620	4.98	0.0E+00	AB040941.1	NT	Homo sapiens mRNA for KIAA1508 protein, partial cds
2901	12828	22623	2.66	0.0E+00	7661903	NT	Homo sapiens KIAA0100 gene product (KIAA0100), mRNA
2901	12828	22624	2.66	0.0E+00	7661903	NT	Homo sapiens KIAA0100 gene product (KIAA0100), mRNA
2902	12829	22625	3.23	0.0E+00	5174574	NT	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (trithorax (Drosophila) homolog); translocated to, 4 (MLLT4) mRNA
2902	12829	22626	3.23	0.0E+00	5174574	NT	Homo sapiens myeloid/lymphoid or mixed-lineage leukemia (trithorax (Drosophila) homolog); translocated to, 4 (MLLT4) mRNA
2907	12833	22630	1.27	0.0E+00	BF110702.1	EST_HUMAN	7n40d03.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3567028 3' similar to TR:Q9VLN1
2907	12833	22631	1.27	0.0E+00	BF110702.1	EST_HUMAN	Q9VLN1 CG17293 PROTEIN.;
2915	12842	22642	2.03	0.0E+00	4505084	NT	7n40d03.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3567028 3' similar to TR:Q9VLN1
2915	12842	22643	2.03	0.0E+00	4505084	NT	Q9VLN1 CG17293 PROTEIN.;
2917	12844	22645	0.94	0.0E+00	4885214	NT	Homo sapiens melanoma antigen, family B, 4 (MAGEB4), mRNA
2917	12844	22646	0.94	0.0E+00	4885214	NT	Homo sapiens melanoma antigen, family B, 4 (MAGEB4), mRNA
2924	12851	22651	1.6	0.0E+00	4758827	NT	Homo sapiens v-erb-a avian erythroblastic leukemia viral oncogene homolog-like 4 (ERBB4) mRNA
2927	12854	22654	1.3	0.0E+00	X15309.1	NT	Homo sapiens v-erb-a avian erythroblastic leukemia viral oncogene homolog-like 4 (ERBB4) mRNA
2927	12854	22655	1.3	0.0E+00	X15309.1	NT	Homo sapiens NF-H gene, exon 4
2929	12856	22657	7.93	0.0E+00	AF106275.1	NT	Homo sapiens NF-H gene, exon 4
2929	12856	22657	7.93	0.0E+00	AF106275.1	NT	Homo sapiens immunoglobulin-like transcript 1c variant 4 (ILT1c) gene, exon 6

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
2943	12870		1.13	0.0E+00	AI149880.1	EST_HUMAN	q143f09.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1752809 3'
2952	12879	22677	0.84	0.0E+00	AF281074.1	NT	Homo sapiens neuropilin 2 (NRP2) gene, complete cds, alternatively spliced
2962	12879	22678	0.84	0.0E+00	AF281074.1	NT	Homo sapiens neuropilin 2 (NRP2) gene, complete cds, alternatively spliced
2963	12880	22679	0.97	0.0E+00	4506118	NT	Homo sapiens prospero-related homeobox 1 (PROX1) mRNA
2954	12881	22680	2.15	0.0E+00	AB004884.1	NT	Homo sapiens mRNA for PKU-alpha, partial cds
2964	12891	22689	1.33	0.0E+00	7662273	NT	Homo sapiens KIAA0737 gene product (KIAA0737), mRNA
2965	12892	22690	1.59	0.0E+00	5729755	NT	Homo sapiens calcium channel, voltage-dependent, gamma subunit 3 (CACNG3), mRNA
2965	12892	22691	1.59	0.0E+00	5729755	NT	Homo sapiens calcium channel, voltage-dependent, gamma subunit 3 (CACNG3), mRNA
2980	12918		0.89	0.0E+00	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C049
2992	12920	22714	1.04	0.0E+00	M74099.1	NT	Human displacement protein (CCAAT) mRNA
3001	12929	22721	0.82	0.0E+00	4506882	NT	Homo sapiens semenogelin 1 (SEMG1) mRNA
3006	12934		4.85	0.0E+00	AF195953.1	NT	Homo sapiens membrane-bound aminopeptidase P (XNPEP2) gene, complete cds
3009	12937	22730	7.86	0.0E+00	5579469	NT	Homo sapiens heat shock 70kD protein 1 (HSPA1A), mRNA
3009	12937	22731	7.86	0.0E+00	5579469	NT	Homo sapiens heat shock 70kD protein 1 (HSPA1A), mRNA
3011	12939		5.08	0.0E+00	AL359403.1	NT	Isform 2 of a novel human mRNA from chromosome 22
3014	12942	22735	2.02	0.0E+00	AF017433.1	NT	Homo sapiens putative transcription factor CR63 (CR63) mRNA, partial cds
							Homo sapiens transcription factor (GHM enhancer 3, JM11 protein, JM4 protein, JM5 protein, T54 protein, JM10 protein, A4 differentiation-dependent protein, triple LIM domain protein 5, and synaptophysin genes, complete cds; and L-type calcium channel α
3017	12945		1.74	0.0E+00	AF196779.1	NT	Homo sapiens interleukin 2 receptor, beta (IL2RB) mRNA
3019	12947	22739	0.99	0.0E+00	4504864	NT	Human germine gene 16.1 for Ig lambda L-chain C region (IgL-C16.1)
3038	12956	22760	2.79	0.0E+00	X03529.1	NT	Homo sapiens F-box protein FBL5 (FBL5) mRNA, complete cds
3043	12970		1.85	0.0E+00	AF199355.1	NT	Homo sapiens melanoma-associated antigen (MAGE-G1) gene, complete cds
3047	12974	22767	1.89	0.0E+00	AF064589.1	NT	Homo sapiens melanoma-associated antigen (MAGE-G1) gene, complete cds
3068	12995	22786	2.85	0.0E+00	AF265206.1	NT	Homo sapiens SWI-SNF complex protein p270 mRNA, partial cds
3069	12996	22787	3.97	0.0E+00	AF149773.1	NT	Homo sapiens NOD1 protein (NOD1) gene, exons 1, 2, and 3
3074	13001	22791	4.21	0.0E+00	7662139	NT	Homo sapiens KIAA0469 gene product (KIAA0469), mRNA
3075	13002	22792	1.64	0.0E+00	AF042076.1	NT	Homo sapiens olfactory receptor-like protein (OLFR 42B) gene, OLFR 42B-g110 allele, partial cds
							Homo sapiens potassium voltage-gated channel, Shab-related subfamily, member 1 (KCNB1) mRNA
3102	13028	22824	3.45	0.0E+00	4826783	NT	Human ferritin heavy chain mRNA, complete cds
3111	13036	22832	19.64	0.0E+00	L20941.1	NT	Homo sapiens mRNA for KIAA0549 protein, partial cds
3115	13040	22836	1.79	0.0E+00	AB011121.1	NT	Homo sapiens mRNA for KIAA0549 protein, partial cds
3115	13040	22837	1.79	0.0E+00	AB011121.1	NT	Homo sapiens mRNA for KIAA0549 protein, partial cds
3123	13048	22845	9.41	0.0E+00	T94870.1	EST_HUMAN	ye32f03.s1 Stratagene lung (#937210) Homo sapiens cDNA clone IMAGE:119453 3' similar to SP-S295539 S29539 BASIC PROTEIN, 23K -;

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3138	13063	22862	1.1	0.0E+00	BF243336.1	EST_HUMAN	601878507F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4107433 5'
3140	13065	22863	1.03	0.0E+00	A1969086.1	EST_HUMAN	wu12h10.x1 NCL_CGAP_G08 Homo sapiens cDNA clone IMAGE:2516903 3'
3145	13070	22870	3.99	0.0E+00	X98922.1	NT	H. sapiens mRNA for gamma-glutamyltransferase
3145	13070	22871	3.99	0.0E+00	X98922.1	NT	H. sapiens mRNA for gamma-glutamyltransferase
3156	13081	22883	1.5	0.0E+00	4758827	NT	Homo sapiens neurexin III (NRXN3) mRNA
3156	13081	22884	1.5	0.0E+00	4758827	NT	Homo sapiens neurexin III (NRXN3) mRNA
3163	13088	22892	7.73	0.0E+00	4504658	NT	Homo sapiens interleukin 1 receptor, type I (IL1R1) mRNA
3164	13089	22893	3.26	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
3164	13089	22894	3.26	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
3180	13105	22910	2.44	0.0E+00	M28699.1	NT	Homo sapiens nucleolar phosphoprotein B23 (NPM1) mRNA, complete cds
3183	13108	22912	2.23	0.0E+00	4502098	NT	Homo sapiens solute carrier family 25 (mitochondrial carrier, adenine nucleotide translocator), member 5 (SLC25A5), nuclear gene encoding mitochondrial protein, mRNA
3188	13113	22918	0.82	0.0E+00	4758055	NT	Homo sapiens CREB binding protein (Rubinstein-Taybi syndrome) (CREBBP) mRNA
3188	13113	22919	0.82	0.0E+00	4758055	NT	Homo sapiens CREB binding protein (Rubinstein-Taybi syndrome) (CREBBP) mRNA
3190	13115	22920	26.3	0.0E+00	AA774783.1	EST_HUMAN	ae87b11.s1 Stratagene schizo brain S11 Homo sapiens cDNA clone IMAGE:97133 3'
3198	13123	22928	4.53	0.0E+00	AF286598.1	NT	Homo sapiens angiotensin binding protein 1 mRNA, complete cds
3198	13123	22929	4.53	0.0E+00	AF286598.1	NT	Homo sapiens angiotensin binding protein 1 mRNA, complete cds
3210	13134	22935	1.56	0.0E+00	4557590	NT	Homo sapiens fibrillin 1 (Marfan syndrome) (FBN1) mRNA
3215	13139	22942	3.35	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
3224	13148		4.39	0.0E+00	M65189.1	NT	Human connexin 43 processed pseudogene
3225							Homo sapiens HLA class III region containing tenascin X (tenascin-X) gene, partial cds; cytochrome P450 21-hydroxylase (CYP21B), complement component C4 (C4B) G11, helicase (SKI2W), RD, complement factor B (BF), and complement component C2 (C2) genes;>
3227	13149	22949	1.19	0.0E+00	AF019413.1	NT	Homo sapiens very large G-protein coupled receptor-1 (VLGR1) mRNA, complete cds
3237	13151	22951	4.15	0.0E+00	AF055084.1	NT	Homo sapiens A kinase (PRKA) anchor protein 1 (AKAP1), mRNA
3237	15066	22959	3.46	0.0E+00	4502014	NT	Homo sapiens A kinase (PRKA) anchor protein 1 (AKAP1), mRNA
3237	15066	22960	3.46	0.0E+00	4502014	NT	Homo sapiens A kinase (PRKA) anchor protein 1 (AKAP1), mRNA
3252	13175	22973	2	0.0E+00	AF265208.1	NT	Homo sapiens SWI-SNF complex protein p270 mRNA, partial cds
3253	13176	22974	0.89	0.0E+00	8923624	NT	Homo sapiens hypothetical protein FLJ20695 (FLJ20695), mRNA
3282	13203	23003	4.86	0.0E+00	A1589294.1	EST_HUMAN	tr58f08.x2 NCL_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2222535 3' similar to SW:RL11_RAT
3289	13211	23011	2.98	0.0E+00	AF128893.1	NT	P25121 50S RIBOSOMAL PROTEIN L11, contains Alu repetitive element;
3289	13211	23012	2.98	0.0E+00	AF128893.1	NT	Homo sapiens telomerase reverse transcriptase (TERT) gene, exons 1-6
3290	13212	23013	1	0.0E+00	7657213	NT	Homo sapiens telomerase reverse transcriptase (TERT) gene, exons 1-6
3290	13212	23014	1	0.0E+00	7657213	NT	Homo sapiens hormonally upregulated neu tumor-associated kinase (HUNK), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3292	13214	23015	1.01	0.0E+00	4502582	NT	Homo sapiens caspase 8, apoptosis-related cysteine protease (CASP8) mRNA
3292	13214	23016	1.01	0.0E+00	4502582	NT	Homo sapiens caspase 8, apoptosis-related cysteine protease (CASP8) mRNA
3296	13218	23019	11.07	0.0E+00	AF111163.1	NT	Homo sapiens pyrin (MEFV) gene, complete cds
3298	13220	23021	0.96	0.0E+00	AB040940.1	NT	Homo sapiens mRNA for KIAA1507 protein, partial cds
3303	13224	23026	0.99	0.0E+00	BE779039.1	EST_HUMAN	601464995F1 NIH_MGC 67 Homo sapiens cDNA clone IMAGE:3868246 5'
3360	13270	23073	3.01	0.0E+00	AU123664.1	EST_HUMAN	AU123664 NT2RM2 Homo sapiens cDNA clone NT2RM2000735 5'
3357	13276	23076	1.66	0.0E+00	7363436	NT	Homo sapiens olfactory receptor, family 10, subfamily C, member 1 (OR10C1), mRNA
3357	13276	23077	1.66	0.0E+00	7363436	NT	Homo sapiens olfactory receptor, family 10, subfamily C, member 1 (OR10C1), mRNA
3360	13279	23079	1.43	0.0E+00	7706239	NT	Homo sapiens neuroblastoma-amplified protein (LOC51594), mRNA
3361	13280	23080	0.99	0.0E+00	AF211189.1	NT	Homo sapiens T-type calcium channel alpha1 subunit Alpha11-a isoform (CACNA11) mRNA, complete cds
3377	13295	23094	1.35	0.0E+00	7662401	NT	Homo sapiens KIAA0952 protein (KIAA0952), mRNA
3377	13295	23095	1.35	0.0E+00	7662401	NT	Homo sapiens KIAA0952 protein (KIAA0952), mRNA
3378	13296	23096	0.96	0.0E+00	4502398	NT	Homo sapiens beaded filament structural protein 1, filensin (BFSP1) mRNA
3381	13299	23098	1.71	0.0E+00	5803067	NT	Homo sapiens leukocyte immunoglobulin-like receptor, subfamily A (with TM domain), member 2 (LILRA2), mRNA
3390	12565	22455	6.04	0.0E+00	AF110763.1	NT	Homo sapiens skeletal muscle LIM-protein 1 (FHL-1) gene, complete cds
3395	13312	23111	2.08	0.0E+00	7657038	NT	Homo sapiens death receptor 6 (DR6), mRNA
3398	13315	23115	1.53	0.0E+00	AJ277276.1	NT	Homo sapiens mRNA for rapa-2 (rapa gene)
3398	13315	23116	1.53	0.0E+00	AJ277276.1	NT	Homo sapiens mRNA for rapa-2 (rapa gene)
3400	13317	23118	5.53	0.0E+00	K02380.1	NT	Bacteriophage P1 replication region including repA, parA, and parB genes and incA, incB, and incC incompatibility determinants
3402	13319	23120	1.21	0.0E+00	7427522	NT	Homo sapiens protein tyrosine phosphatase, receptor type, T (PTPRT), mRNA
3409	13326	23126	3.68	0.0E+00	AJ935159.1	EST_HUMAN	wp14d10.x1 NCL CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2464819 3' similar to TR:O73634 O73634 NEURAL CELL ADHESION MOLECULE ;
3409	13326	23127	3.68	0.0E+00	AJ935159.1	EST_HUMAN	wp14d10.x1 NCL CGAP_Lu19 Homo sapiens cDNA clone IMAGE:2464819 3' similar to TR:O73634 O73634 NEURAL CELL ADHESION MOLECULE ;
3413	13330	23132	2.67	0.0E+00	AJ278120.1	NT	Homo sapiens mRNA for putative ankyrin-repeat containing protein (ORF1)
3420	13337	23141	2.86	0.0E+00	6552332	NT	Homo sapiens v-fos FBJ murine osteosarcoma viral oncogene homolog (FOS), mRNA
3420	13337	23142	2.86	0.0E+00	6552332	NT	Homo sapiens v-fos FBJ murine osteosarcoma viral oncogene homolog (FOS), mRNA
3426	13343	23148	1.14	0.0E+00	M14123.1	NT	Human endogenous retrovirus HERV-K10
3431	13348	23153	6.18	0.0E+00	U43293.1	NT	Human MDS1A (AML1/MDS1 fusion) mRNA, partial cds
3436	13353	23157	1.01	0.0E+00	9558718	NT	Homo sapiens hypothetical protein (AF038169), mRNA
3436	13353	23158	1.01	0.0E+00	9558718	NT	Homo sapiens hypothetical protein (AF038169), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3440	13357	23163	2.06	0.0E+00	AF045452.1	NT	Homo sapiens cell-line KG1 transcriptional regulatory protein p54 mRNA, complete cds
3440	13357	23164	2.06	0.0E+00	AF045452.1	NT	Homo sapiens cell-line KG1 transcriptional regulatory protein p54 mRNA, complete cds
3448	13365	23172	1.23	0.0E+00	AF231922.1	NT	Homo sapiens chromosome 21 unknown mRNA
3455	13371	23175	0.94	0.0E+00	AA626677.1	EST_HUMAN	ab5112.1.r1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone IMAGE:844367 5'
3455	13371	23176	0.94	0.0E+00	AA626677.1	EST_HUMAN	ab5112.1.r1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone IMAGE:844367 5'
3455	13371	23177	0.94	0.0E+00	AA626677.1	EST_HUMAN	ab5112.1.r1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone IMAGE:844367 5'
3458	13374	23180	1.11	0.0E+00	4508028	NT	Homo sapiens zinc finger protein 45 (a Kruppel-associated box (KRAB) domain polypeptide) (ZNF45) mRNA
3461	13377	23182	2.23	0.0E+00	BE304791.1	EST_HUMAN	601143853F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:3051373 5'
3461	13377	23183	2.23	0.0E+00	BE304791.1	EST_HUMAN	601143853F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:3051373 5'
3463	13379	23185	1.43	0.0E+00	4826795	NT	Homo sapiens potassium voltage-gated channel, Isk-related family, member 2 (KCNE2) mRNA
3470	13386	23191	0.92	0.0E+00	AI384007.1	EST_HUMAN	te35g12.x1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:2088742 3' similar to TR:000498
3473	13389	23194	0.96	0.0E+00	M10976.1	NT	O00498 MYASTHENIA GRAVIS AUTOANTIGEN GRAVIN ; Human endogenous retroviral DNA (4-1), complete retroviral segment
3495	13412	23217	0.82	0.0E+00	4508894	NT	Homo sapiens semenogelin II (SEMG2) mRNA
3497	13414	23225	1.3	0.0E+00	AF078988.1	NT	Homo sapiens homologous yeast-44.2 protein mRNA, complete cds
3505	13422	23225	1.39	0.0E+00	AL133204.1	NT	Novel human gene mapping to chromosome X
3507	13423	23226	0.96	0.0E+00	AB040909.1	NT	Homo sapiens mRNA for KIAA1476 protein, partial cds
3527	13443		0.98	0.0E+00	AI081907.1	EST_HUMAN	ox77c11.x1 Soares_NHMPu_S1 Homo sapiens cDNA clone IMAGE:1662356 3' similar to WP.T19B4.4 CE13742 ;
3529	13445	23242	1.26	0.0E+00	6325463	NT	Homo sapiens butyrophilin, subfamily 3, member A3 (BTN3A3), mRNA
3533	13449		4.53	0.0E+00	AW852217.1	EST_HUMAN	QV0-C.T0225-230300-169-e01 CT0225 Homo sapiens cDNA
3540	13456		0.95	0.0E+00	AF118946.1	NT	Homo sapiens gamma-glutamylcysteine synthetase (GLCLC) gene, partial cds
3541	13457	23250	7.43	0.0E+00	BF676393.1	EST_HUMAN	602084583F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4248596 5'
3564	13478		1.1	0.0E+00	4826967	NT	Homo sapiens retinoblastoma-binding protein 2 (RBBP2) mRNA
3566	13480	23269	0.98	0.0E+00	AW664693.1	EST_HUMAN	h184g01.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2979024 3'
3566	13480	23270	0.98	0.0E+00	AW664693.1	EST_HUMAN	h184g01.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2979024 3'
3569	13483	23274	1.13	0.0E+00	4826763	NT	Homo sapiens heparan sulfate (glucosamine) 3-O-sulfotransferase 1 (HS3ST1) mRNA
3571	13485	23277	0.98	0.0E+00	7662319	NT	Homo sapiens KIAA0806 gene product (KIAA0806), mRNA
3578	13492	23282	0.79	0.0E+00	4557752	NT	Homo sapiens midline 1 (Optiz/BBB syndrome) (MID1) mRNA
3578	13492	23283	0.79	0.0E+00	4557752	NT	Homo sapiens midline 1 (Optiz/BBB syndrome) (MID1) mRNA
3596	13510	23297	1.51	0.0E+00	D87327.1	NT	Homo sapiens mRNA for G protein-coupled inward rectifier potassium channel, complete cds
3600	13514		28.67	0.0E+00	7669491	NT	Homo sapiens glyceraldehyde-3-phosphate dehydrogenase (GAPD), mRNA
3616	13530	23316	4.26	0.0E+00	AB026542.1	NT	Homo sapiens WAVE2 mRNA for WASP-family protein, complete cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3619	13533	23318	3.26	0.0E+00	AF124250.1	NT	Homo sapiens SH2-containing protein Nsp2 mRNA, complete cds
3619	13533	23319	3.26	0.0E+00	AF124250.1	NT	Homo sapiens SH2-containing protein Nsp2 mRNA, complete cds
3623	13537	23323	1.5	0.0E+00	AA852743.1	EST_HUMAN	NHTBCae15g09f1 Normal Human Trabecular Bone Cells Homo sapiens cDNA clone NHTBCae15g09
3623	13537	23324	1.5	0.0E+00	AA852743.1	EST_HUMAN	NHTBCae15g09f1 Normal Human Trabecular Bone Cells Homo sapiens cDNA clone NHTBCae15g09
3626	13540	23326	2.2	0.0E+00	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
3626	13540	23327	2.2	0.0E+00	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
3630	13544	23331	1.79	0.0E+00	5729928	NT	Homo sapiens matrix metalloproteinase 24 (membrane-inserted) (MMP24), mRNA
3632	13546	23333	1.25	0.0E+00	AB018339.1	NT	Homo sapiens mRNA for KIAA0796 protein, partial cds
3645	13559	23344	3.53	0.0E+00	AW298134.1	EST_HUMAN	UIH-BW0-ajs-e-12-Q-UI.s1 NCI CGAP Sub6 Homo sapiens cDNA clone IMAGE:2733022 3'
3645	13559	23345	3.53	0.0E+00	AW298134.1	EST_HUMAN	UIH-BW0-ajs-e-12-Q-UI.s1 NCI CGAP Sub6 Homo sapiens cDNA clone IMAGE:2733022 3'
3668	13582	23369	0.99	0.0E+00	AB004630.1	NT	Human gene for Type XIX collagen a1 chain, exon 6
3669	13583	23370	1.03	0.0E+00	AA463659.1	EST_HUMAN	aa06g01.11 Soares_NHMPu.S1 Homo sapiens cDNA clone IMAGE:312496 5' similar to SW:KRB4_SHEEP_P02445 KERATIN, HIGH-SULFUR MATRIX PROTEIN, IIB4. [1];
3677	13591	23377	3.35	0.0E+00	7657468	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
3687	13600	23387	0.91	0.0E+00	AB037835.1	NT	Homo sapiens mRNA for KIAA1414 protein, partial cds
3699	13613	23397	3.88	0.0E+00	7662183	NT	Homo sapiens KIAA0569 gene product (KIAA0569), mRNA
3701	13615	23399	7.88	0.0E+00	4506718	NT	Homo sapiens ribosomal protein S2 (RPS2) mRNA
3705	13618	23401	1.02	0.0E+00	7657065	NT	Homo sapiens v-ets avian erythroblastosis virus E26 oncogene related (ERG), mRNA
3705	13618	23402	1.02	0.0E+00	7657065	NT	Homo sapiens soluble neuropilin-1 mRNA, complete cds
3746	13659	23441	1.13	0.0E+00	AF145712.1	NT	Homo sapiens DNA mismatch repair protein (MLH3) gene, complete cds
3747	13660	23442	1.01	0.0E+00	AF155658.1	NT	Pan troglodytes olfactory receptor (PTR208) gene, partial cds
3748	13661	23442	2.3	0.0E+00	AF179733.1	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
3751	13684	23446	1.69	0.0E+00	7657468	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
3751	13684	23447	1.69	0.0E+00	7657468	NT	Homo sapiens similar to rat integral membrane glycoprotein POM121 (POM121L1), mRNA
3752	13685	23448	1.45	0.0E+00	AF020091.1	NT	Homo sapiens smooth muscle myosin heavy chain SM1 mRNA, alternatively spliced, partial cds
3756	13689	23453	1.1	0.0E+00	10181139	NT	Mus musculus junctophilin 1 (Jp1-pending), mRNA
3758	13671	23455	1.1	0.0E+00	A1377699.1	EST_HUMAN	tc62f10.x1 Soares_NFL_T_GBC.S1 Homo sapiens cDNA clone IMAGE:2091307 3'
3759	13672	23455	1.7	0.0E+00	AF152496.1	NT	Homo sapiens protocadherin beta 3 (PODHB-beta3) mRNA, complete cds
3760	13673	23456	4.46	0.0E+00	4758199	NT	Homo sapiens desmoplakin (DPI, DPLI) (DSP) mRNA
3763	13676	23458	11.67	0.0E+00	S78685.1	NT	Homo sapiens ATP-sensitive inwardly rectifying K-channel subunit (KCNJ8/BIR1) gene, complete cds
3764	13677	23459	2	0.0E+00	7710148	NT	Homo sapiens methyl CpG binding protein 2 (MECP2), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3765	13678	23460	2.39	0.0E+00	7662183	NT	Homo sapiens KIAA0569 gene product (KIAA0569), mRNA
3768	13681	23462	1.31	0.0E+00	AF069901.2	NT	Homo sapiens myosin light chain kinase isoform 2 (MLCK) mRNA, complete cds
3768	13681	23463	1.31	0.0E+00	AF069901.2	NT	Homo sapiens myosin light chain kinase isoform 2 (MLCK) mRNA, complete cds
3769	13682	23464	1.97	0.0E+00	4504534	NT	Homo sapiens 5-hydroxytryptamine (serotonin) receptor 1D (HTR1D) mRNA
3773	13685	23467	1.61	0.0E+00	AL163279.2	NT	Homo sapiens chromosome 21 segment HS21C079
3775	13687	23470	1.12	0.0E+00	6912735	NT	Homo sapiens transient receptor potential channel 5 (TRPC5), mRNA
3780	13692	23478	5.67	0.0E+00	4503178	NT	Homo sapiens chromosome X open reading frame 5 (CXORF5) mRNA
3780	13692	23479	5.67	0.0E+00	4503178	NT	Homo sapiens chromosome X open reading frame 5 (CXORF5) mRNA
3782	13694	23482	3.93	0.0E+00	U09412.1	NT	Human zinc finger protein ZNF134 mRNA, complete cds
3784	13696	23483	1.63	0.0E+00	4826783	NT	Homo sapiens potassium voltage-gated channel, Shab-related subfamily, member 1 (KCNB1) mRNA
3787	13699	23486	0.99	0.0E+00	AF012615.1	NT	Homo sapiens familial mental retardation protein 2 (FMR2) gene, exon 11
3788	13700	23487	1.87	0.0E+00	4759171	NT	Homo sapiens SC35-interacting protein 1 (SRRP129), mRNA
3790	13702	23489	0.82	0.0E+00	AF099117.1	NT	Homo sapiens amphiphysin gene, partial cds
3799	13711	23498	2.54	0.0E+00	A1864727.1	EST_HUMAN	wk01f01.x1 NCI CGAP Lym12 Homo sapiens cDNA clone IMAGE:2411085 3' similar to TR:O43340
3802	13714	23502	6.08	0.0E+00	4506742	NT	O43340 R28830_2, contains element PTR7 repetitive element ; Homo sapiens ribosomal protein S8 (RPS8), mRNA
3807	13719	23508	1.41	0.0E+00	AL040338.1	EST_HUMAN	DKFZp434N0413_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434N0413 5'
3813	13725	23515	1	0.0E+00	6005887	NT	Homo sapiens AP1 gamma subunit binding protein 1 (AP1GBP1), mRNA
3813	13725	23516	1	0.0E+00	6005887	NT	Homo sapiens AP1 gamma subunit binding protein 1 (AP1GBP1), mRNA
3815	13727	23518	2.45	0.0E+00	4504138	NT	Homo sapiens glutamate receptor, metabotropic 3 (GRM3) mRNA
3816	13728		1.8	0.0E+00	4505078	NT	Homo sapiens melanoma antigen, family B, 1 (MAGEB1) mRNA
3820	13732	23521	0.87	0.0E+00	AF149412.1	NT	Homo sapiens HBP17 heparin-binding and FGF-binding protein gene, complete cds
3830	13742	23534	1.27	0.0E+00	4500758	NT	Homo sapiens tyrosine receptor 3 (RYR3) mRNA
3833	13745	23537	1.62	0.0E+00	4585942	NT	Homo sapiens zinc finger protein (KIAA0412) mRNA
3840	13751	23544	1.75	0.0E+00	BF365296.1	EST_HUMAN	RC3-HT0860-170800-011-a12 HT0860 Homo sapiens cDNA
3842	13753	23546	1.4	0.0E+00	AW888221.1	EST_HUMAN	MXRA5 Human matrix tissue expression library Homo sapiens cDNA clone Incyte 1996726 similar to MXRA5 Matrix remodeling associated gene 5
3842	13753	23547	1.4	0.0E+00	AW888221.1	EST_HUMAN	MXRA5 Human matrix tissue expression library Homo sapiens cDNA clone Incyte 1996726 similar to MXRA5
3848	13759	23552	1.78	0.0E+00	AF129533.1	NT	Matrix remodeling associated gene 5
3853	13764	23557	3.2	0.0E+00	BE378602.1	EST_HUMAN	Homo sapiens F-box protein Fhl3b (FBL3B) mRNA, partial cds
3854	13765	23558	1.27	0.0E+00	BE313146.1	EST_HUMAN	601236986FT NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3608800 5'
3860	13771	23563	0.97	0.0E+00	AW580740.1	EST_HUMAN	601153727FT NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3509743 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
3893	13803	23587	4.6	0.0E+00	AF116195.1	NT	Homo sapiens cancer-testis antigen CT10 (CT10) gene, complete cds
3893	13803	23588	4.6	0.0E+00	AF116195.1	NT	Homo sapiens cancer-testis antigen CT10 (CT10) gene, complete cds
3903	13813		3.93	0.0E+00	M23910.1	NT	Human MHC class II lymphocyte antigen DPw4-beta-2 pseudogene, exon 2
3905	13815		5.44	0.0E+00	AL163303.2	NT	Homo sapiens chromosome 21 segment HS21C103
3912	13822	23603	1.53	0.0E+00	AL118494.1	NT	Novel human gene mapping to chromosome 20
3916	13825	23605	2.89	0.0E+00	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
3924	13833	23613	1.46	0.0E+00	AL163268.2	NT	Homo sapiens chromosome 21 segment HS21C068
3935	13844		25.75	0.0E+00	4503470	NT	Homo sapiens eukaryotic translation elongation factor 1 alpha 1 (EEF1A1) mRNA
3939	13847	23623	1.18	0.0E+00	7662183	NT	Homo sapiens KIAA0669 gene product (KIAA0669), mRNA
3940	13848	23624	2.05	0.0E+00	U09366.1	NT	Human zinc finger protein ZNF133
3940	13867	23645	6.24	0.0E+00	AB015610.1	NT	Chlorocebus aethiops mRNA for ribosomal protein S4X, complete cds
3968	13875		3.79	0.0E+00	AJ238617.1	NT	Homo sapiens mRNA for UGA suppressor tRNA-associated antigenic protein (IRNA48 gene)
3976	13883	23658	3.28	0.0E+00	AJ277276.1	NT	Homo sapiens mRNA for rapa-2 (rapa gene)
3976	13883	23659	3.28	0.0E+00	AJ277276.1	NT	Homo sapiens mRNA for rapa-2 (rapa gene)
3981	13888	23663	5.63	0.0E+00	5032026	NT	Homo sapiens retinoblastoma-binding protein 4 (RBBP4) mRNA
3981	13888	23664	5.63	0.0E+00	5032026	NT	Homo sapiens retinoblastoma-binding protein 4 (RBBP4) mRNA
3983	13900	23677	0.81	0.0E+00	4503914	NT	Homo sapiens phosphoribosylglycinamide formyltransferase, phosphoribosylglycinamide synthetase,
4000	13906	23682	4.89	0.0E+00	4885306	NT	phosphoribosylimidazole synthetase (GART) mRNA
4001	13907	23683	1.94	0.0E+00	AB006625.1	NT	Homo sapiens G protein-coupled receptor 21 (GPR21), mRNA
4003	13909	23684	1.28	0.0E+00	4758807	NT	Homo sapiens mRNA for KIAA0287 gene, partial cds
4004	13910	23685	6.1	0.0E+00	11419297	NT	Homo sapiens ras GTPase activating protein-like (NGAP) mRNA
4005	13911	23686	1.58	0.0E+00	AL096857.1	NT	Homo sapiens IMP (inosine monophosphate) dehydrogenase 1 (MPDH1), mRNA
4013	13919	23695	2.7	0.0E+00	AF165527.1	NT	Novel human mRNA from chromosome 1, which has similarities to BAT2 genes
4017	15071	23697	0.85	0.0E+00	AF157476.1	NT	Homo sapiens DGCR8 (DGCR8) mRNA, complete cds
4022	11031	20872	0.8	0.0E+00	4826947	NT	Homo sapiens DNA polymerase zeta catalytic subunit (REV3) mRNA, complete cds
4022	11031	20873	0.8	0.0E+00	4826947	NT	Homo sapiens protein kinase, X-linked (PRKX) mRNA
4028	13931	23707	0.99	0.0E+00	5901905	NT	Homo sapiens protein kinase, X-linked (PRKX) mRNA
4029	13932	23708	1.16	0.0E+00	4503854	NT	Homo sapiens butyrophilin, subfamily 3, member A2 (BTN3A2), mRNA
4029	13932	23709	1.16	0.0E+00	4503854	NT	Homo sapiens GA-binding protein transcription factor, alpha subunit (60kD) (GABPA), mRNA
4032	13935	23711	1.05	0.0E+00	8922391	NT	Homo sapiens GA-binding protein transcription factor, alpha subunit (60kD) (GABPA), mRNA
4032	13935	23712	1.05	0.0E+00	8922391	NT	Homo sapiens hypothetical protein FLJ10379 (FLJ10379), mRNA
4041	13944	23722	4.59	0.0E+00	A1982597.1	EST_HUMAN	Homo sapiens hypothetical protein FLJ10379 (FLJ10379), mRNA
4041	13944	23723	4.59	0.0E+00	A1982597.1	EST_HUMAN	wu040404.x1 NCI_CGAP GC6 Homo sapiens cDNA clone IMAGE:2515975 3'

Table 4
Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Database Source	Top Hit Descriptor
4044	13946	23725	0.88	0.0E+00	EST_HUMAN	MR1-HT0707-100500-001-a02 HT0707 Homo sapiens cDNA
4044	13946	23726	0.88	0.0E+00	EST_HUMAN	MR1-HT0707-100500-001-a02 HT0707 Homo sapiens cDNA
4048	13950		1.99	0.0E+00	EST_HUMAN	601120778F1 NIH_MGC_20 Homo sapiens cDNA clone IMAGE:2967690 5'
4055	13957	23733	0.97	0.0E+00	4507476 NT	Homo sapiens transglutaminase 3 (E polypeptide, protein-glutamine-gamma-glutamyltransferase) (TGM3) mRNA
4056	13958	23734	1.98	0.0E+00	5729725 NT	Homo sapiens nuclear receptor coactivator 3 (NCOA3), mRNA
4064	13966		6.19	0.0E+00	AW675598.1	ba51f04.x1 NIH_MGC_10 Homo sapiens cDNA clone IMAGE:2900095 3' similar to SW:THI2_BOVIN
4069	13971	23748	1.52	0.0E+00	AW408788.1	Q95108 MITOCHONDRIAL THIOREDOXIN PRECURSOR :
4071	13973	23751	1.33	0.0E+00	8922466 NT	UIHF-BM0-adv-c-02-0-UI r1 NIH_MGC_38 Homo sapiens cDNA clone IMAGE:3063147 5'
4071	13973	23752	1.33	0.0E+00	8922466 NT	Homo sapiens hypothetical protein FLJ10498 (FLJ10498), mRNA
4081	13983		1.96	0.0E+00	5174632 NT	Homo sapiens hypothetical protein FLJ10498 (FLJ10498), mRNA
4098	13998	23775	7.82	0.0E+00	AA401438.1	Homo sapiens polycystic kidney disease (polycystin) and REJ (sperm receptor for egg jelly, sea urchin homolog)-like (PKDREJ) mRNA
4098	13998	23776	7.82	0.0E+00	AA401438.1	zu68h07.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:743197 3' similar to contains Alu repetitive element; contains element MER35 repetitive element ;
4113	14013	23791	3.79	0.0E+00	4507720 NT	repetitive element; contains element MER35 repetitive element ;
4113	14013	23792	3.79	0.0E+00	4507720 NT	Homo sapiens titin (TTN) mRNA
4126	14026	23801	0.87	0.0E+00	4506882 NT	Homo sapiens titin (TTN) mRNA
4130	14030	23803	8.21	0.0E+00	4758199 NT	Homo sapiens semenogelin I (SEMG1) mRNA
4130	14030	23804	8.21	0.0E+00	4758199 NT	Homo sapiens desmoplakin (DPI, DPII) (DSP) mRNA
4137	14037		0.88	0.0E+00	AL163303.2 NT	Homo sapiens desmoplakin (DPI, DPII) (DSP) mRNA
4163	14063	23837	1.13	0.0E+00	AJ003145.1 NT	Homo sapiens chromosome 21 segment HS21C103
4176	14076	23851	7.84	0.0E+00	J02610.1 NT	Homo sapiens mRNA for olfactory receptor protein, pseudogene
4190	14090	23868	0.95	0.0E+00	AW936699.1	Human apolipoprotein B-100 mRNA, complete cds
4196	14096	23876	0.88	0.0E+00	4826827 NT	PM2-DT0023-080300-004-a08 DT0023 Homo sapiens cDNA
4196	14096	23877	0.88	0.0E+00	4826827 NT	Homo sapiens myelodysplasia syndrome 1 (MDS1) mRNA
4196	14096	23877	0.88	0.0E+00	4826827 NT	Homo sapiens myelodysplasia syndrome 1 (MDS1) mRNA
4196	14098	23879	5.73	0.0E+00	AF174590.1 NT	Homo sapiens F-box protein Fbl4 (FBL4) mRNA, partial cds
4206	14105		1.92	0.0E+00	AI189844.1	qd23f06.x1 Soares_placenta_8to9weeks_2NbHP8to9W Homo sapiens cDNA clone IMAGE:1724579 3' similar to contains MER20 b2 MER20 repetitive element ;
4210	14108		4.09	0.0E+00	U14520.1 NT	Human CBFA3 (Cbfa3) gene, partial cds
4224	14122	23897	0.98	0.0E+00	4505646 NT	Homo sapiens proprotein convertase subtilisin/kexin type 2 (PCSK2) mRNA
4230	14128	23904	0.87	0.0E+00	6563384 NT	Homo sapiens protein kinase C, nu (PRKCN), mRNA

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4230	14128	23905	0.87	0.0E+00	6563384	NT	Homo sapiens protein kinase C, α (PRKCN), mRNA
4237	14135	23911	1.17	0.0E+00	U10991.1	NT	Human G2 protein mRNA, partial cds
4237	14135	23912	1.17	0.0E+00	U10991.1	NT	Human G2 protein mRNA, partial cds
4245	14144	23917	10.2	0.0E+00	6912281	NT	Homo sapiens COMPLEMENT COMPONENT C1q RECEPTOR (C1QR), mRNA
4263	14162		1.15	0.0E+00	AF153047.2	NT	Homo sapiens gap junction protein connexin-36 (CX36) gene, complete cds
4268	14167	23943	1.59	0.0E+00	U03901.1	NT	Human Ig light chain VL1 region germline (hum1v1c2c) gene, partial cds
4274	14173	23950	5.17	0.0E+00	L14561.1	NT	Homo sapiens plasma membrane calcium ATPase isoform 1 (ATP2B1) gene, alternative splice products, partial cds
4278	14177	23955	2.78	0.0E+00	Z80780.1	NT	H. sapiens H2B/h gene
4278	14177	23956	2.78	0.0E+00	Z80780.1	NT	H. sapiens H2B/h gene
4284	14183	23962	1.58	0.0E+00	X60483.1	NT	H. sapiens H4/d gene for H4 histone
4284	14183	23963	1.58	0.0E+00	X60483.1	NT	H. sapiens H4/d gene for H4 histone
4289	14187	23969	8.95	0.0E+00	7662091	NT	Homo sapiens KIAA0390 gene product (KIAA0390), mRNA
4289	14187	23970	8.95	0.0E+00	7662091	NT	Homo sapiens KIAA0390 gene product (KIAA0390), mRNA
4289	14197	23982	10.81	0.0E+00	4885126	NT	Homo sapiens caudal type homeo box transcription factor 4 (CDX4), mRNA
4302	14200	23984	0.98	0.0E+00	AB037781.1	NT	Homo sapiens mRNA for KIAA1360 protein, partial cds
4333	14230	24012	1.1	0.0E+00	7019456	NT	Homo sapiens myosin regulatory light chain interacting protein (MIR), mRNA
4341	14238		5.85	0.0E+00	AF195953.1	NT	Homo sapiens membrane-bound aminopeptidase P (XNPEP2) gene, complete cds
4346	14243	24025	8.1	0.0E+00	AJ249765.1	NT	Homo sapiens ACTN2 gene for alpha-Actinin 2, exon 10
4346	14243	24026	8.1	0.0E+00	AJ249765.1	NT	Homo sapiens ACTN2 gene for alpha-Actinin 2, exon 10
4368	14264		1.92	0.0E+00	AF200629.1	NT	Homo sapiens HPS1 gene, intron 5
4401	14296	24080	40.23	0.0E+00	AW084964.1	EST_HUMAN	xc68e08.x1 NCL_CGAP_Eso2 Homo sapiens cDNA clone IMAGE:2580446 3' similar to SW-AHNK_HUMAN Q09666 NEUROBLAST DIFFERENTIATION ASSOCIATED PROTEIN AHNK ;
4403	15073		1.91	0.0E+00	8051619	NT	Homo sapiens LIM domain kinase 2 (LIMK2), transcript variant 2a, mRNA
4405	14299	24083	1.38	0.0E+00	AF016050.1	NT	Homo sapiens vascular endothelial cell growth factor 165 receptor/neuropilin (VEGF165) mRNA, complete cds
4408	14302		7.5	0.0E+00	AL163207.2	NT	Homo sapiens chromosome 21 segment HS21C007
4410	14304	24087	1.29	0.0E+00	AW381570.1	EST_HUMAN	PM1-HT0305-101199-002-d03 HT0305 Homo sapiens cDNA
4416	14310	24094	1.83	0.0E+00	AJ278120.1	NT	Homo sapiens mRNA for putative ankyrin-repeat containing protein (ORF1)
4416	14310	24095	1.83	0.0E+00	AJ278120.1	NT	Homo sapiens mRNA for putative ankyrin-repeat containing protein (ORF1)
4418	14312	24097	3.91	0.0E+00	4758467	NT	Homo sapiens G protein-coupled receptor 50 (GPR50) mRNA
4419	14313	24098	2.3	0.0E+00	AF108830.1	NT	Homo sapiens serine-threonine protein kinase (MNBH) mRNA, complete cds
4424	14318	24104	1.47	0.0E+00	Z66526.1	NT	H. sapiens pancreatic polypeptide receptor PP1 gene
4429	14324	24111	1.12	0.0E+00	S76684.1	NT	Homo sapiens ATP-sensitive inwardly rectifying K-channel subunit (KCNJ6/BIR1) gene, exon

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4430	14325	24112	1.95	0.0E+00	AF111163.1	NT	Homo sapiens pyrin (MEFV) gene, complete cds
4430	14325	24113	1.95	0.0E+00	AF111163.1	NT	Homo sapiens pyrin (MEFV) gene, complete cds
4439	15074	24123	3.08	0.0E+00	6005973	NT	Homo sapiens zinc finger protein 195 (ZNF195), mRNA
4444	14338	24128	5.37	0.0E+00	AF208161.1	NT	Homo sapiens syncytin precursor, mRNA, complete cds
4449	14343	24135	1.92	0.0E+00	AF152337.1	NT	Homo sapiens protobactherin gamma C3 (PCDH-gamma-C3) mRNA, complete cds
4452	14346	24139	1.36	0.0E+00	5454175	NT	Homo sapiens zinc finger protein 211 (ZNF211), mRNA
4462	14356	24147	15.15	0.0E+00	4503470	NT	Homo sapiens eukaryotic translation elongation factor 1 alpha 1 (EEF1A1) mRNA
4473	14367	24156	1.47	0.0E+00	4503098	NT	Homo sapiens chondroitin sulfate proteoglycan 4 (melanoma-associated) (OSPG4), mRNA
4477	14371	24161	1.58	0.0E+00	4502556	NT	Homo sapiens calmodulin-dependent protein kinase IV (GAMK4) mRNA
4481	14375	24163	2.78	0.0E+00	L35485.1	NT	Homo sapiens iduronate sulphate sulphatase (IDS) gene, complete cds
4483	14377	24163	9.78	0.0E+00	7662091	NT	Homo sapiens KIAA0390 gene product (KIAA0390), mRNA
4483	14377	24164	9.78	0.0E+00	7662091	NT	Homo sapiens KIAA0390 gene product (KIAA0390), mRNA
4498	14392	24177	2.04	0.0E+00	AF143314.1	NT	Homo sapiens PTEN (PTEN) gene, exons 3 through 5
4500	14394	24179	8.67	0.0E+00	AJ245418.1	NT	Homo sapiens mRNA for G7c protein (G7c gene located in the class III region of the major histocompatibility complex)
4500	14394	24180	8.67	0.0E+00	AJ245418.1	NT	Homo sapiens mRNA for G7c protein (G7c gene located in the class III region of the major histocompatibility complex)
4511	14404		0.84	0.0E+00	D87675.1	NT	Homo sapiens DNA for amyloid precursor protein, complete cds
4523	14416		1.5	0.0E+00	AA174072.1	EST_HUMAN	zp18g08.s1 Stratagene fetal retina 937202 Homo sapiens cDNA clone IMAGE:609854 3'
4526	14419		1.55	0.0E+00	7667410	NT	Homo sapiens odz (odd Ozifen-m, Drosophila) homolog 1 (ODZ1), mRNA
4528	14421		1.22	0.0E+00	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
4529	14422	24205	1.71	0.0E+00	AF184110.1	NT	Homo sapiens cyclophilin-related protein (NKTR) gene, complete cds
4530	14423	24206	4.37	0.0E+00	AL163300.2	NT	Homo sapiens chromosome 21 segment HS21C100
4531	14424		1.89	0.0E+00	AB037521.1	NT	Homo sapiens gene for natriuretic protein, partial cds
4541	14434	24216	1.91	0.0E+00	4557857	NT	Homo sapiens keratin 18 (KRT18) mRNA
4541	14434	24217	1.91	0.0E+00	4557857	NT	Homo sapiens keratin 18 (KRT18) mRNA
4542	14435	24218	1.3	0.0E+00	AF153819.1	NT	Homo sapiens inwardly-rectifying potassium channel Kir2.1 (KCNJ2) gene, exon 2 and complete cds
4542	14435	24219	1.3	0.0E+00	AF153819.1	NT	Homo sapiens inwardly-rectifying potassium channel Kir2.1 (KCNJ2) gene, exon 2 and complete cds
4543	14436	24220	1.18	0.0E+00	AF167441.1	NT	Mus musculus E-cadherin binding protein E7 mRNA, complete cds
4554	14013	23791	7.43	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
4554	14013	23792	7.43	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
4560	14452	24238	21.96	0.0E+00	Y18890.1	NT	Human endogenous retrovirus type K (HERV-K), gag, pol and env genes

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4744	14629	24415	1.4	0.0E+00	P52740	SWISSPROT	ZINC FINGER PROTEIN 132
4746	14631	24417	0.97	0.0E+00	8922180	NT	Homo sapiens hypothetical protein DKFZp762E1312 (DKFZp762E1312), mRNA
4748	14633	24419	0.8	0.0E+00	AL163203.2	NT	Homo sapiens chromosome 21 segment HS21C003
4752	14637	24424	7.78	0.0E+00	8923080	NT	Homo sapiens hypothetical protein FLJ20073 (FLJ20073), mRNA
4756	14641	24428	0.95	0.0E+00	7661979	NT	Homo sapiens KIAA0187 gene product (KIAA0187), mRNA
4757	14642	24429	1.66	0.0E+00	M94081.1	NT	Human Tcr-C-delta gene, exons 1-4; Tcr-Y-delta gene, exons 1-2; T-cell receptor alpha (Tcr-alpha) gene, J1-J61 segments; and Tcr-C-alpha gene, exons 1-4
4757	14642	24430	1.66	0.0E+00	M94081.1	NT	Human Tcr-C-delta gene, exons 1-4; Tcr-Y-delta gene, exons 1-2; T-cell receptor alpha (Tcr-alpha) gene, J1-J61 segments; and Tcr-C-alpha gene, exons 1-4
4759	14644	24432	1.69	0.0E+00	X94628.1	NT	H. sapiens MeCP-2 gene
4759	14644	24433	1.69	0.0E+00	X94628.1	NT	H. sapiens MeCP-2 gene
4762	14647	24436	1.08	0.0E+00	M55582.1	NT	Human collagenase type IV (CLG4) gene, exon 2
4763	14648	24437	3.22	0.0E+00	AL163280.2	NT	Homo sapiens chromosome 21 segment HS21C080
4776	14660	24447	0.99	0.0E+00	5032150	NT	Homo sapiens TATA box binding protein (TBP)-associated factor, RNA polymerase II, 28kD (TAF21) mRNA
4786	14671	24458	0.82	0.0E+00	6806018	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
4788	14673	24460	1.44	0.0E+00	X92841.1	NT	H. sapiens MICA gene
4791	14676	24463	1.97	0.0E+00	4585942	NT	Homo sapiens zinc finger protein (KIAA0412) mRNA
4792	14677	24464	1.18	0.0E+00	AB014533.1	NT	Homo sapiens mRNA for KIAA0633 protein, partial cds
4794	14679	24466	2.26	0.0E+00	6677648	NT	Mus musculus zinc finger protein interacting with K protein 1 (Zik1), mRNA
4795	14680	24467	1.05	0.0E+00	5174560	NT	Homo sapiens meningioma expressed antigen 6 (coiled-coil proline-rich) (MGEA6), mRNA
4797	14682	24469	8.64	0.0E+00	4758109	NT	Homo sapiens desmoplakin (DPI, DPL) (DSP) mRNA
4799	14684	24471	1.2	0.0E+00	Y16723.1	NT	Homo sapiens gene encoding filensin, exon 8
4800	14685	24472	1.61	0.0E+00	7705546	NT	Homo sapiens zinc-finger DNA-binding protein (HUMHOXY1), mRNA
4801	14686		1.33	0.0E+00	AJ010442.1	NT	Homo sapiens mRNA for immunoglobulin kappa light chain, anti-RhD, therad 7
4806	14690	24477	24.91	0.0E+00	AF055066.1	NT	Homo sapiens MHC class 1 region
4808	14692		2.43	0.0E+00	4505508	NT	Homo sapiens opiod receptor, delta 1 (OPRD1) mRNA
4809	14693	24480	2.46	0.0E+00	AF091711.1	NT	Homo sapiens splice variant AKAP350 mRNA, partial cds
4812	14013	23791	5.48	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
4812	14013	23792	5.48	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
4814	14697	24484	0.86	0.0E+00	AJ277892.1	NT	Homo sapiens partial TTN gene for titin
4824	14706	24490	12.01	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
4827	14709	24493	0.95	0.0E+00	D63562.1	NT	Homo sapiens COL4A6 gene for a6(V) collagen, exon 44 and partial cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4831	14713	24496	1.52	0.0E+00	4503684	NT	Homo sapiens farnesyl diphosphate synthase (farnesyl pyrophosphate synthetase, dimethylallyltransferase, geranyltransferase) (FDFS) mRNA
4837	14319	24105	1.06	0.0E+00	4506952	NT	Homo sapiens sialyltransferase 8 (alpha-N-acetylneuraminic: alpha-2,8-sialyltransferase, GD3 synthase) (SIAT8) mRNA
4845	14726	24508	1.31	0.0E+00	D15050.1	NT	Human mRNA for transcription factor AREB6, complete cds
4845	14726	24509	1.31	0.0E+00	D15050.1	NT	Human mRNA for transcription factor AREB6, complete cds
4854	14734	24515	0.86	0.0E+00	AB026988.1	NT	Homo sapiens DNA, DLEC1 to ORCTL4 gene region, section 1/2 (DLEC1, ORCTL3, ORCTL4 genes, complete cds)
4871	14751	24530	1.34	0.0E+00	AL163284.2	NT	Homo sapiens chromosome 21 segment HS21C084
4879	14759	24536	1.45	0.0E+00	AW452728.1	EST_HUMAN	UI-H-B13-alc-f-02-Q-UI.s1 NCI_OGAP_Sub5 Homo sapiens cDNA clone IMAGE:3068691 3'
4885	14766	24542	1.2	0.0E+00	8922926	NT	Homo sapiens hypothetical protein FLJ11190 (FLJ11190), mRNA
4886	14706	24490	7.99	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
4888	14768	24544	2.81	0.0E+00	AF058332.1	NT	Homo sapiens titin (TTN) gene, alternative splice products, partial cds
4888	14768	24545	2.81	0.0E+00	AF058332.1	NT	Homo sapiens titin (TTN) gene, alternative splice products, partial cds
4894	14774	24552	2.95	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
4897	14777		4.34	0.0E+00	U14967.1	NT	Human ribosomal protein L21 mRNA, complete cds
4910	14789		2.58	0.0E+00	BE408863.1	EST_HUMAN	601303729F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3638118 5'
4915	14794	24569	5.37	0.0E+00	4758199	NT	Homo sapiens desmoplakin (DPI, DPLI) (DSP) mRNA
4925	14804	24574	0.99	0.0E+00	AB028966.1	NT	Homo sapiens mRNA for KIAA1043 protein, partial cds
4939	14817	24584	1.66	0.0E+00	8923441	NT	Homo sapiens hypothetical protein FLJ20477 (FLJ20477), mRNA
4939	14817	24585	1.66	0.0E+00	8923441	NT	Homo sapiens hypothetical protein FLJ20477 (FLJ20477), mRNA
4963	14830	24596	1.06	0.0E+00	U82671.2	NT	Homo sapiens chromosome Xq28 melanoma antigen family A2a (MAGEA2A), melanoma antigen family A12 (MAGEA12), melanoma antigen family A2b (MAGEA2B), melanoma antigen family A3 (MAGEA3), caltactin (CALT), NAD(P)H dehydrogenase-like protein (NSDHL), and LI>
4963	14830	24597	1.06	0.0E+00	U82671.2	NT	Homo sapiens chromosome Xq28 melanoma antigen family A2a (MAGEA2A), melanoma antigen family A12 (MAGEA12), melanoma antigen family A2b (MAGEA2B), melanoma antigen family A3 (MAGEA3), caltactin (CALT), NAD(P)H dehydrogenase-like protein (NSDHL), and LI>
4957	14013	23791	5.81	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
4957	14013	23792	5.81	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
4959	14834	24602	3.51	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
4960	14835	24603	7.76	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
4968	14843		1.17	0.0E+00	4758225	NT	Homo sapiens E2F transcription factor 2 (E2F2) mRNA
4978	14853	24619	1.35	0.0E+00	AF016705.1	NT	Homo sapiens E6-AP ubiquitin-protein ligase (UBE3A) gene, exon 3
4987	14862		1.33	0.0E+00	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009

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Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
4990	14865		37.78	0.0E+00	D50657.1	NT	Homo sapiens gamma-cytoplasmic actin (ACTGP3) pseudogene
5000	14875	24639	2.29	0.0E+00	AJ277892.1	NT	Homo sapiens partial TTN gene for titin
5001	14876	24640	3.02	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
5003	14878	24642	4.23	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
5005	14013	23791	2.89	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
5006	14013	23792	2.89	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
5018	14892	24660	2.43	0.0E+00	X52988.1	NT	Bacillus amyloquelaciens sacB gene for levansucrase (EC 2.4.1.10)
5037	14909	24661	1.84	0.0E+00	AF240635.1	NT	Homo sapiens vascular endothelial cadherin 2 mRNA, complete cds
5037	14909	24682	1.84	0.0E+00	AF240635.1	NT	Homo sapiens vascular endothelial cadherin 2 mRNA, complete cds
5040	14912	24686	1.01	0.0E+00	5454153	NT	Homo sapiens cyclophilin (USA-CYP) mRNA
5054	14926	24698	1.22	0.0E+00	6677700	NT	Homo sapiens G-protein coupled receptor (RE2), mRNA
5055	14013	23791	11.22	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
5055	14013	23792	11.22	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
5056	14013	23791	14.9	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
5056	14013	23792	14.9	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
5065	14935	24708	1.33	0.0E+00	4557362	NT	Homo sapiens PR domain containing 1, with ZNF domain (PRDM1) mRNA
5070	14940	24713	1.03	0.0E+00	M10905.1	NT	Human cellular fibronectin mRNA
5070	14940	24714	1.03	0.0E+00	M10905.1	NT	Human cellular fibronectin mRNA
5071	14941	24715	1.06	0.0E+00	U91328.1	NT	Human hereditary haemochromatosis region, histone 2A-like protein gene, hereditary haemochromatosis (HLA-H) gene, RoRet gene, and sodium phosphate transporter (NPT3) gene, complete cds
5080	14950	24726	3.04	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
5096	14013	23791	6.27	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
5096	14013	23792	6.27	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
5098	14967	24743	1.34	0.0E+00	L35475.1	NT	Human olfactory receptor-like gene, complete cds
5098	14967	24744	1.34	0.0E+00	L35475.1	NT	Human olfactory receptor-like gene, complete cds
5099	14013	23791	9.38	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
5099	14013	23792	9.38	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
5124	14992	24765	0.94	0.0E+00	AF195658.1	NT	Homo sapiens DNA mismatch repair protein (MLH3) gene, complete cds
5126	14993	24766	1.35	0.0E+00	5360213	NT	Homo sapiens glycocalyx 3 (GPC3) mRNA
5130	14997	24768	0.8	0.0E+00	AE000327.1	NT	Escherichia coli K-12 MG1655 section 217 of 400 of the complete genome
5140	15007	24778	1.06	0.0E+00	4885474	NT	Homo sapiens melanoma antigen, family C, 1 (MAGEC1), mRNA
5169	15026	24793	0.96	0.0E+00	4885474	NT	Homo sapiens melanoma antigen, family C, 1 (MAGEC1), mRNA
5162	15028	24794	1.59	0.0E+00	4758597	NT	Homo sapiens mannosidase, alpha, class 2A, member 1 (MAN2A1), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5165	15031	24797	1.12	0.0E+00	AF245703.1	NT	Homo sapiens toll-like receptor 8 (TLR8) mRNA, complete cds
5165	15031	24798	1.12	0.0E+00	AF245703.1	NT	Homo sapiens toll-like receptor 8 (TLR8) mRNA, complete cds
5186	15050	24814	1.72	0.0E+00	AF006061.1	NT	Homo sapiens placental growth hormone isoform hGH-V3 (hGH-V) mRNA, complete cds
5187	14013	23791	10.43	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
5187	14013	23792	10.43	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
5189	15052	24816	6.75	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
5193	15056		1.38	0.0E+00	AL163285.2	NT	Homo sapiens chromosome 21 segment HS21C085
5195	15058	24822	3.97	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
5195	15058	24823	3.97	0.0E+00	4507720	NT	Homo sapiens titin (TTN) mRNA
5196	15059	24824	0.96	0.0E+00	4502358	NT	Homo sapiens beaded filament structural protein 1, filensin (BFSP1) mRNA
5208	15086		15.66	0.0E+00	AF093093.1	NT	Homo sapiens acinifase (ACO2) gene, nuclear gene encoding mitochondrial protein, exon 15
5214	15137	24830	2.25	0.0E+00	AF137286.1	NT	Homo sapiens keratin 12 (KRT12) gene, complete cds
5214	15137	24831	2.25	0.0E+00	AF137286.1	NT	Homo sapiens keratin 12 (KRT12) gene, complete cds
5226	15150	24917	2.99	0.0E+00	9256579	NT	Homo sapiens protodactherin alpha 13 (PCDHA13), mRNA
5234	15158	24926	3.82	0.0E+00	BE931080.1	EST_HUMAN	RC3-GN0076-310800-013-603 GN0076 Homo sapiens cDNA
5238	15162	24930	3.12	0.0E+00	AF182034.1	NT	Homo sapiens polycystic kidney disease-like 2 protein (PKDL2) mRNA, complete cds
5238	15162	24931	3.12	0.0E+00	AF182034.1	NT	Homo sapiens polycystic kidney disease-like 2 protein (PKDL2) mRNA, complete cds
5245	15168	24940	1.92	0.0E+00	X56163.1	NT	H. sapiens immunoglobulin heavy chain gene, variable region
5245	15168	24941	1.92	0.0E+00	X56163.1	NT	H. sapiens immunoglobulin heavy chain gene, variable region
5307	15228	25032	5.8	0.0E+00	BE675498.1	EST_HUMAN	7110c06.x1 NCI_CGAP_CLL1 Homo sapiens cDNA clone IMAGE:3294250 3'
5308	15229	25033	1.77	0.0E+00	BE220753.1	EST_HUMAN	h89a02.x1 NCI_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3165194 3' similar to SW:Y054_HUMAN
5309	15230	25034	1.67	0.0E+00	BE794412.1	EST_HUMAN	P42694 HYPOTHETICAL PROTEIN KIAA0054. ;
5309	15230	25035	1.67	0.0E+00	BE794412.1	EST_HUMAN	607589422F1 NIH_MGC 7 Homo sapiens cDNA clone IMAGE:3943804 5'
5311	15232	25037	5.46	0.0E+00	M29808.1	NT	601589422F1 NIH_MGC 7 Homo sapiens cDNA clone IMAGE:3943804 5'
5313	15234	25038	1.81	0.0E+00	A1791363.1	EST_HUMAN	Homo sapiens eosinophil peroxidase (EPP) gene, exon 7
5319	19442	25044	5.42	0.0E+00	11421038	NT	ch68a09.y5 NCI_CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1472162 5' similar to gb:M18512 IG
5324	15244		2.91	0.0E+00	BF665962.1	EST_HUMAN	HEAVY CHAIN PRECURSOR V-J REGION (HUMAN);
5327	15247	25052	1.92	0.0E+00	BE538857.1	EST_HUMAN	Homo sapiens Sp4 transcription factor (SP4), mRNA
5333	15253	25075	1.31	0.0E+00	BE292784.1	EST_HUMAN	602119828F1 NIH_MGC 56 Homo sapiens cDNA clone IMAGE:4276254 5'
5337	15257	25080	1.8	0.0E+00	BF526328.1	EST_HUMAN	601061489F1 NIH_MGC 10 Homo sapiens cDNA clone IMAGE:3447839 5'
5337	15257	25081	1.8	0.0E+00	BF526328.1	EST_HUMAN	601103891F1 NIH_MGC 15 Homo sapiens cDNA clone IMAGE:2988310 5'
5348	15987	26122	1.71	0.0E+00	4557394	NT	602071372F1 NCI_CGAP_Brn64 Homo sapiens cDNA clone IMAGE:4214272 5'
							602071372F1 NCI_CGAP_Brn64 Homo sapiens cDNA clone IMAGE:4214272 5'
							Homo sapiens Bloom syndrome (BLM) mRNA

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5352	15272	25101	5.24	0.0E+00	AF257737.1	NT	Homo sapiens ciliary dynein heavy chain 9 (DNAH9) mRNA, complete cds
5352	15272	25102	5.24	0.0E+00	AF257737.1	NT	Homo sapiens ciliary dynein heavy chain 9 (DNAH9) mRNA, complete cds
5362	15282	25114	1.45	0.0E+00	D26535.1	NT	Human gene for dihydrolipoamide succinyltransferase, complete cds (exon 1-15)
5362	15282	25115	1.45	0.0E+00	D26535.1	NT	Human gene for dihydrolipoamide succinyltransferase, complete cds (exon 1-15)
5374	15294	25141	1.67	0.0E+00	11420819	NT	Homo sapiens olfactory receptor, family 2, subfamily F, member 1 (OR2F1), mRNA
5386	15305	25158	3.26	0.0E+00	BF529931.1	EST_HUMAN	602042322F1 NCL_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4179988 5'
5386	15305	25159	3.26	0.0E+00	BF529931.1	EST_HUMAN	602042322F1 NCL_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4179988 5'
5389	15308	25161	2.35	0.0E+00	BF313139.1	EST_HUMAN	601897638F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4126815 5'
5396	15315	25362	4.21	0.0E+00	11434392	NT	Homo sapiens calcium channel, voltage-dependent, alpha 1G subunit (CACNA1G), mRNA
5420	15341		2.43	0.0E+00	AW867316.1	EST_HUMAN	MRO-SN0037-030400-001-h07 SN0037 Homo sapiens cDNA
5431	15351	25405	3.05	0.0E+00	BE292889.1	EST_HUMAN	601105291F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2987903 5'
5431	15351	25406	3.05	0.0E+00	BE292889.1	EST_HUMAN	601105291F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2987903 5'
5444	15365	25420	1.31	0.0E+00	11420819	NT	Homo sapiens olfactory receptor, family 2, subfamily F, member 1 (OR2F1), mRNA
5444	15365	25421	1.31	0.0E+00	11420819	NT	Homo sapiens olfactory receptor, family 2, subfamily F, member 1 (OR2F1), mRNA
5451	15372	25429	5.35	0.0E+00	AF064254.1	NT	Homo sapiens very long-chain acyl-CoA synthetase homolog 1 mRNA, complete cds
5451	15372	25430	5.35	0.0E+00	AF064254.1	NT	Homo sapiens very long-chain acyl-CoA synthetase homolog 1 mRNA, complete cds
5455	15376	25435	2.9	0.0E+00	AJ224639.1	NT	Homo sapiens Surf-5 and Surf-6 genes
5455	15376	25436	2.9	0.0E+00	AJ224639.1	NT	Homo sapiens Surf-5 and Surf-6 genes
5470	15390	25453	6.69	0.0E+00	M85719.1	EST_HUMAN	EST02238 Fetal brain, Striatagene (cat#936206) Homo sapiens cDNA clone HFBCM48
5474	15394	25459	3.67	0.0E+00	AW405472.1	EST_HUMAN	UHF-BL0-adh-3-02-0-UI,r1 NIH_MGC_37 Homo sapiens cDNA clone IMAGE:3061688 5'
5489	15408	25471	5.74	0.0E+00	AW361877.1	EST_HUMAN	PM3-CT0263-091299-007-h05 CT0263 Homo sapiens cDNA
5489	15408	25472	5.74	0.0E+00	AW361877.1	EST_HUMAN	PM3-CT0263-091299-007-h05 CT0263 Homo sapiens cDNA
5489	15408	25473	5.74	0.0E+00	AW361877.1	EST_HUMAN	PM3-CT0263-091299-007-h05 CT0263 Homo sapiens cDNA
5491	15410	25475	1.88	0.0E+00	U36281.1	NT	Human beta-prime-adaptin (BAM22) gene, exon 13
5531	15448	25515	3.26	0.0E+00	AA195905.1	EST_HUMAN	zp95b11.r1 Striatagene muscle 937209 Homo sapiens cDNA clone IMAGE:627933 5' similar to gb:X03740
5532	15449	25516	1.5	0.0E+00	AJ006345.1	NT	MYOSIN HEAVY CHAIN, SKELETAL MUSCLE (HUMAN);
5532	15449	25517	1.5	0.0E+00	AJ006345.1	NT	Homo sapiens KVLQT1 gene
5537	15454	25524	2	0.0E+00	A1207616.1	EST_HUMAN	Homo sapiens KVLQT1 gene
5548	15464	25534	3.98	0.0E+00	11416801	NT	HA2981 Human fetal liver cDNA library Homo sapiens cDNA
5555	15471	25542	6.76	0.0E+00	BE560082.1	EST_HUMAN	Homo sapiens protocadherin beta 2 (PCDH2), mRNA
5556	15472	25543	1.58	0.0E+00	10048478	NT	601345141F1 NIH_MGC_8 Homo sapiens cDNA clone IMAGE:3677843 5'
5557	15473	25544	3.03	0.0E+00	U86961.1	NT	Human L-type calcium channel beta-1 subunit (CACNL1B1) gene, exon 13B and isoform beta-1B, complete cds

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Probe SEQ ID NO.	Exon SEQ ID NO.	ORF SEQ ID NO.	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5557	15473	25545	3.03	0.0E+00	U86931.1	NT	Human L-type calcium channel beta-1 subunit (CACNLB1) gene, exon 13B and isoform beta-1B, complete cds
5564	15480	25553	2.1	0.0E+00	BF338835.1	EST_HUMAN	602036272F1 NCL_CGAP_Brn64 Homo sapiens cDNA clone IMAGE:4184321 5'
5566	15482	25555	2.93	0.0E+00	BE273983.1	EST_HUMAN	601104482F1 NIH_MGC_14 Homo sapiens cDNA clone IMAGE:3347463 5'
5574	15489	25565	1.74	0.0E+00	BF569905.1	EST_HUMAN	602185852F1 NIH_MGC_45 Homo sapiens cDNA clone IMAGE:4310076 5'
5586	15510	25588	2.47	0.0E+00	AF217289.1	NT	Homo sapiens cadherin 20 (CDH20) mRNA, complete cds
5597	15511	25589	1.89	0.0E+00	BE828144.1	EST_HUMAN	RC5-ET0027-210600-022-G10 ET0027 Homo sapiens cDNA
5601	15515	25593	1.41	0.0E+00	BE598636.1	EST_HUMAN	601645287F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:3930453 5'
5615	15530	25613	1.66	0.0E+00	BF031742.1	EST_HUMAN	601558000F1 NIH_MGC_38 Homo sapiens cDNA clone IMAGE:3827775 5'
5615	15530	25614	1.66	0.0E+00	BF031742.1	EST_HUMAN	601558000F1 NIH_MGC_38 Homo sapiens cDNA clone IMAGE:3827775 5'
5631	15545	25633	1.54	0.0E+00	W33069.1	EST_HUMAN	z08h06.r1 Soares parathyroid tumor_NbHPA Homo sapiens cDNA clone IMAGE:321755 5'
5631	15545	25634	1.54	0.0E+00	W33069.1	EST_HUMAN	z08h06.r1 Soares parathyroid tumor_NbHPA Homo sapiens cDNA clone IMAGE:321755 5'
5632	15546		2.16	0.0E+00	AF012618.1	NT	Homo sapiens familial mental retardation protein 2 (FMR2) gene, exon 14
5634	15548	25636	3.57	0.0E+00	BE280197.1	EST_HUMAN	601138515F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3605323 5'
5638	15551	25642	2.74	0.0E+00	BE889810.1	EST_HUMAN	601512630F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3914238 5'
5649	15561	25654	1.63	0.0E+00	11433071	NT	Homo sapiens KIAA0735 gene product, synaptic vesicle protein 2B homolog (KIAA0735), mRNA
5649	15561	25655	1.63	0.0E+00	11433071	NT	Homo sapiens KIAA0735 gene product, synaptic vesicle protein 2B homolog (KIAA0735), mRNA
5660	19450	25668	10.66	0.0E+00	9789986	NT	Homo sapiens potassium voltage-gated channel, Shal-related subfamily, member 2 (KCND2), mRNA
5663	15574	25671	1.29	0.0E+00	AA193506.1	EST_HUMAN	zr40h01.r1 Soares_NhMMPu_S1 Homo sapiens cDNA clone IMAGE:665905 5' similar to SW:YY05_HUMAN P42694 HYPOTHETICAL MYELOID CELL LINE PROTEIN 5. ;
5663	15574	25672	1.29	0.0E+00	AA193506.1	EST_HUMAN	zr40h01.r1 Soares_NhMMPu_S1 Homo sapiens cDNA clone IMAGE:665905 5' similar to SW:YY05_HUMAN P42694 HYPOTHETICAL MYELOID CELL LINE PROTEIN 5. ;
5680	15589	25690	13.03	0.0E+00	U34625.1	NT	Human T cell surface glycoprotein CD-6 mRNA, complete cds
5680	15589	25691	13.03	0.0E+00	U34625.1	NT	Human T cell surface glycoprotein CD-6 mRNA, complete cds
5730	15638	25742	1.41	0.0E+00	AU137772.1	EST_HUMAN	AU137772 PLACE1 Homo sapiens cDNA clone PLACE1007201 5'
5741	15649	25756	3.4	0.0E+00	U45982.1	NT	Human G protein-coupled receptor GPR-9-6 gene, complete cds
5755	15683	25770	4.14	0.0E+00	AA204740.1	EST_HUMAN	zq81403.r1 Striatogene hNT neuron (#937233) Homo sapiens cDNA clone IMAGE:648005 5' similar to TR:G854195 G854195 LEUKOCYTE SURFACE PROTEIN. ;
5766	15694	25771	3.57	0.0E+00	11545913	NT	Homo sapiens xylosyltransferase II (XT2), mRNA
5766	15694	25772	3.57	0.0E+00	11545913	NT	Homo sapiens xylosyltransferase II (XT2), mRNA
5775	15692	25790	2.8	0.0E+00	BE257173.1	EST_HUMAN	601109532F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3350622 5'
5784	15690	25800	1.47	0.0E+00	L35930.1	NT	Human anion exchanger (AE1) gene, exons 1-20
5795	15701	25811	1.38	0.0E+00	11435930	NT	Homo sapiens peptide transporter 3 (LOC51296), mRNA

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Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
5826	15732		8.1	0.0E+00	AV650020.1	EST_HUMAN	AV650020 GLC Homo sapiens cDNA clone GLCCAD09 3'
5830	15736	25948	2.81	0.0E+00	AW575598.1	EST_HUMAN	U1-HF-BL0-acc-g-12-0-UI.s1 NIH_MGC_37 Homo sapiens cDNA clone IMAGE:3058751 3'
5832	15738	25850	4.21	0.0E+00	H01255.1	EST_HUMAN	Y27b03.r1 Soares placenta Nb2HP Homo sapiens cDNA clone IMAGE:149933 5'
5838	15744	25857	1.99	0.0E+00	X15377.1	NT	Human gene for the light and heavy chains of myeloperoxidase
5843	15749	25862	4.25	0.0E+00	BE735989.1	EST_HUMAN	601305338F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3639816 5'
5843	15749	25863	4.25	0.0E+00	BE735989.1	EST_HUMAN	601305338F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3639816 5'
5847	15753	25869	11.57	0.0E+00	AU119245.1	EST_HUMAN	AU119245 HEMBA1 Homo sapiens cDNA clone HEMBA1005360 5'
5847	15753	25870	11.57	0.0E+00	AU119245.1	EST_HUMAN	AU119245 HEMBA1 Homo sapiens cDNA clone HEMBA1005360 5'
5854	15760	25878	1.56	0.0E+00	A1989483.1	EST_HUMAN	ws25c07.x1 NCI CGAP GC6 Homo sapiens cDNA clone IMAGE:2498220 3'
5859	15765	25882	4.81	0.0E+00	BE293153.1	EST_HUMAN	601105344F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2987963 5'
5859	15765	25883	4.81	0.0E+00	BE293153.1	EST_HUMAN	601105344F1 NIH_MGC_15 Homo sapiens cDNA clone IMAGE:2987963 5'
5901	15807	25931	1.36	0.0E+00	AW406348.1	EST_HUMAN	U1-HF-BL0-acc-h-02-0-UI.r1 NIH_MGC_37 Homo sapiens cDNA clone IMAGE:3059931 5'
5901	15807	25932	1.36	0.0E+00	AW406348.1	EST_HUMAN	U1-HF-BL0-acc-h-02-0-UI.r1 NIH_MGC_37 Homo sapiens cDNA clone IMAGE:3059931 5'
5921	15826	25951	1.69	0.0E+00	AV719444.1	EST_HUMAN	AV719444 GLC Homo sapiens cDNA clone GLCEHC06 5'
5930	15835	25958	2.24	0.0E+00	AF190860.1	NT	Homo sapiens low voltage-activated T-type calcium channel alpha 1G splice variant CavT.1a (CACNA1G) mRNA, complete cds
5936	15841	25964	3.45	0.0E+00	AW163640.1	EST_HUMAN	au96h08.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2784159 5' similar to TR:O15390 O15390 GT24. [3] TR:O43840 TR:O43206 ;
5936	15841	25964	3.45	0.0E+00	AW163640.1	EST_HUMAN	au96h08.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2784159 5' similar to TR:O15390 O15390 GT24. [3] TR:O43840 TR:O43206 ;
5951	15866	25978	4.79	0.0E+00	BE799873.1	EST_HUMAN	601587561F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3941847 5'
5955	15860	25981	7.23	0.0E+00	BE889813.1	EST_HUMAN	601512038F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913311 5'
5955	15860	25982	7.23	0.0E+00	BE889813.1	EST_HUMAN	601512038F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3913311 5'
5961	15866	25988	3.71	0.0E+00	L24493.1	NT	Human antigen CD27 gene, exons 1-2
5964	15869	25991	2.15	0.0E+00	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
5964	15869	25992	2.15	0.0E+00	AL163204.2	NT	Homo sapiens chromosome 21 segment HS21C004
5970	15875	25999	3.54	0.0E+00	6005983	NT	Homo sapiens zona pellucida glycoprotein 3A (sperm receptor) (ZP3A), mRNA
5973	15877	26001	4.13	0.0E+00	AI638412.1	EST_HUMAN	tt31f11.x1 NCJ CGAP GC6 Homo sapiens cDNA clone IMAGE:2242413 3' similar to SW:WNT3_MOUSE
5974	15878	26002	1.79	0.0E+00	L32832.1	NT	P17563 WNT-3 PROTO-ONCOGENE PROTEIN PRECURSOR ;
5980	15885	26007	3.58	0.0E+00	AA434584.1	EST_HUMAN	Homo sapiens zinc finger homeodomain protein (ATBF1-A) mRNA, complete cds
5991	15896	26019	1.48	0.0E+00	BE925875.1	EST_HUMAN	zw52c03.r1 Soares total fetus Nb2HF8_9w Homo sapiens cDNA clone IMAGE:773698 5'
6011	15916	26044	1.44	0.0E+00	AU125928.1	EST_HUMAN	QV3-BN0047-300800-278-c06 BN0047 Homo sapiens cDNA
6041	15944	26076	7.44	0.0E+00	BE169131.1	EST_HUMAN	AU125928 NT2RM4 Homo sapiens cDNA clone NT2RM4002430 5'
6041	15944	26076	7.44	0.0E+00	BE169131.1	EST_HUMAN	PM3-HT0520-230200-002-c08 HT0520 Homo sapiens cDNA

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6042	15945	26077	1.81	0.0E+00	BF085657.1	EST_HUMAN	IL5-GN0032:180900-145-d07 GN0032 Homo sapiens cDNA
6063	16046	26191	3.15	0.0E+00	AA190755.1	EST_HUMAN	zp88e03.r1 Stragene HeLa cell s3 937216 Homo sapiens cDNA clone IMAGE:627292 5'
6071	16054	26201	6.08	0.0E+00	A1940621.1	EST_HUMAN	IL3-ST0024-230799-001-B01 ST0024 Homo sapiens cDNA
6071	16054	26202	6.08	0.0E+00	A1940621.1	EST_HUMAN	IL3-ST0024-230799-001-B01 ST0024 Homo sapiens cDNA
6076	16059	26208	3.07	0.0E+00	11435626	NT	Homo sapiens CD6 antigen (CD6), mRNA
6094	15104	24867	1.98	0.0E+00	BE566381.1	EST_HUMAN	601339977F1 NIH_MGC 53 Homo sapiens cDNA clone IMAGE:3882267 5'
6099	15109	24872	13.15	0.0E+00	BE867889.1	EST_HUMAN	601443667F1 NIH_MGC 65 Homo sapiens cDNA clone IMAGE:3847697 5'
6099	15109	24873	13.15	0.0E+00	BE867889.1	EST_HUMAN	601443667F1 NIH_MGC 65 Homo sapiens cDNA clone IMAGE:3847697 5'
6101	15995	26130	2.07	0.0E+00	BE550162.1	EST_HUMAN	7b49703.x1 NCI CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3231581 3' similar to SW:GG95_HUMAN
6101	15995	26131	2.07	0.0E+00	BE550162.1	EST_HUMAN	7b49703.x1 NCI CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3231581 3' similar to SW:GG95_HUMAN
6118	16012	26150	1.46	0.0E+00	BF088376.1	EST_HUMAN	Q08379 GOLGIN-95.;
6121	16015	26153	3.84	0.0E+00	AA195106.1	EST_HUMAN	Q08379 GOLGIN-95.;
6126	15973		10.28	0.0E+00	11034810	NT	Q08379 GOLGIN-95.;
6135	15982	26118	2.57	0.0E+00	BF569905.1	EST_HUMAN	Homo sapiens catenin (cadherin-associated protein), delta 2 (neural plakophilin-related arm-repeat protein) (CTNND2), mRNA
6142	15990		2.32	0.0E+00	J03009.1	NT	602185852F1 NIH_MGC_45 Homo sapiens cDNA clone IMAGE:4310076 5'
6146	16019	26157	2.8	0.0E+00	AF217289.1	NT	Human MYCL2 gene, complete cds
6146	16019	26158	2.8	0.0E+00	AF217289.1	NT	Homo sapiens cadherin 20 (CDH20) mRNA, complete cds
6154	15112	24876	2.75	0.0E+00	11420775	NT	Homo sapiens cadherin 20 (CDH20) mRNA, complete cds
6168	15125	24842	5.63	0.0E+00	BE262941.1	EST_HUMAN	Homo sapiens melanoma antigen, family B, 2 (MAGEB2), mRNA
6168	15125	24843	2.32	0.0E+00	Z37976.1	NT	601148954F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3501829 5'
6169	15126	24844	2.32	0.0E+00	Z37976.1	NT	H. sapiens mRNA for latent transforming growth factor-beta binding protein (LTBP-2)
6170	15127	24845	2.83	0.0E+00	AF257737.1	NT	H. sapiens mRNA for latent transforming growth factor-beta binding protein (LTBP-2)
6170	15127	24846	2.83	0.0E+00	AF257737.1	NT	Homo sapiens ciliary dynein heavy chain 9 (DNAH9) mRNA, complete cds
6175	15132	24851	1.35	0.0E+00	AF310105.1	NT	Homo sapiens ciliary dynein heavy chain 9 (DNAH9) mRNA, complete cds
6178	16064	26213	2.18	0.0E+00	BF569905.1	EST_HUMAN	Homo sapiens NALP1 mRNA, complete cds
6181	16067	26217	3.58	0.0E+00	L01978.1	NT	602185852F1 NIH_MGC_45 Homo sapiens cDNA clone IMAGE:4310076 5'
6190	16075	26224	5.61	0.0E+00	BF506996.1	EST_HUMAN	Human type IV sodium channel alpha polypeptide (SCN4A) gene, exon 19
6193	16078	26227	1.76	0.0E+00	U41302.1	NT	601889823F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4123948 5'
6225	16091	26241	1.34	0.0E+00	AW954806.1	EST_HUMAN	Human chromosome 16 creatine transporter (SLC6A8) and (CDM) paralogous genes, complete cds
6226	16092	26242	1.41	0.0E+00	BE254103.1	EST_HUMAN	EST366876 IMAGE reserences, MAGC Homo sapiens cDNA
							601113958F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3354566 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
6237	16103	26253	5.9	0.0E+00	AU133213.1	EST_HUMAN	AU133213 NT2RP4 Homo sapiens cDNA clone NT2RP4001556 5'
6253	16119		2.44	0.0E+00	AU143706.1	EST_HUMAN	AU143706 Y79AA1 Homo sapiens cDNA clone Y79AA1002365 5'
6260	16126	26279	1.31	0.0E+00	BE891286.1	EST_HUMAN	601431819F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3917164 5'
6260	16126	26280	1.31	0.0E+00	BE891286.1	EST_HUMAN	601431819F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3917164 5'
6273	15137	24830	1.97	0.0E+00	AF137286.1	NT	Homo sapiens keratin 12 (KRT12) gene, complete cds
6273	15137	24831	1.97	0.0E+00	AF137286.1	NT	Homo sapiens keratin 12 (KRT12) gene, complete cds
6286	16150	26305	3.63	0.0E+00	11436699	NT	Homo sapiens vitamin D (1,25-dihydroxyvitamin D3) receptor (VDR), mRNA
6286	16150	26306	3.63	0.0E+00	11436699	NT	Homo sapiens vitamin D (1,25-dihydroxyvitamin D3) receptor (VDR), mRNA
6302	16166	26323	25.51	0.0E+00	AI128344.1	EST_HUMAN	qc67a07.x1 Soares_placenta_8to9weeks_2NBHP8to9W Homo sapiens cDNA clone IMAGE:1714644 3' similar to SW:ARSD_HUMAN P51689 ARVLSULFATASE D PRECURSOR ; contains element HGR repetitive element ;
6302	16166	26324	25.51	0.0E+00	AI128344.1	EST_HUMAN	qc67a07.x1 Soares_placenta_8to9weeks_2NBHP8to9W Homo sapiens cDNA clone IMAGE:1714644 3' similar to SW:ARSD_HUMAN P51689 ARVLSULFATASE D PRECURSOR ; contains element HGR repetitive element ;
6304	16168	26326	18.73	0.0E+00	11426392	NT	Homo sapiens myosin, heavy polypeptide 8, skeletal muscle, perinatal (MYH8), mRNA
6304	16168	26327	18.73	0.0E+00	11426392	NT	Homo sapiens myosin, heavy polypeptide 8, skeletal muscle, perinatal (MYH8), mRNA
6306	16170		14.06	0.0E+00	BF337375.1	EST_HUMAN	602035089F1 NCI_CGAP_Brn64 Homo sapiens cDNA clone IMAGE:4182839 5'
6306	16172	26329	5.1	0.0E+00	AA128453.1	EST_HUMAN	zn60f09.1 Stratiagene muscle 937209 Homo sapiens cDNA clone IMAGE:562601 5' similar to TR:G806562 G806562 NEBULIN ;
6328	16191	26353	6.72	0.0E+00	AF005213.1	NT	Homo sapiens ankyrin 1 (ANK1) mRNA, complete cds
6328	16191	26354	6.72	0.0E+00	AF005213.1	NT	Homo sapiens ankyrin 1 (ANK1) mRNA, complete cds
6337	16200	26360	7.55	0.0E+00	X70172.1	NT	H sapiens DNA for ZNGP2 pseudogene, exon 4
6339	16202	26362	11.09	0.0E+00	U45448.1	NT	Human P2x1 receptor mRNA, complete cds
6339	16202	26363	11.09	0.0E+00	U45448.1	NT	Human P2x1 receptor mRNA, complete cds
6347	16210	26372	1.43	0.0E+00	AW956503.1	EST_HUMAN	EST368573 MAGC resequences, MAGD Homo sapiens cDNA
6349	16212	26374	2.54	0.0E+00	AW950516.1	EST_HUMAN	EST362586 MAGC resequences, MAGA Homo sapiens cDNA
6389	16251	26411	1.67	0.0E+00	AW239326.1	EST_HUMAN	x639a05.y1 NCI_CGAP_Lu31 Homo sapiens cDNA clone IMAGE:2578640 5' similar to TR:Q08050 Q08050 HNF3FH TRANSCRIPTION FACTOR GENES ;
6400	16261		1.8	0.0E+00	AU117553.1	EST_HUMAN	AU117553 HEMBA1 Homo sapiens cDNA clone HEMBA1001661 5'
6401	16262	26422	3.64	0.0E+00	11427135	NT	Homo sapiens glucagon-like peptide 2 receptor (GLP2R), mRNA
6411	16272	26434	54.65	0.0E+00	AA211663.1	EST_HUMAN	zn56102.11 Stratiagene muscle 937209 Homo sapiens cDNA clone IMAGE:562203 5' similar to gb:X03740 MYOSIN HEAVY CHAIN, SKELETAL MUSCLE (HUMAN);
6462	16321	26486	4.25	0.0E+00	AI752561.1	EST_HUMAN	cn17d05.x1 Normal Human Trabecular Bone Cells Homo sapiens cDNA clone NH-TBC_cn17d05 random

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6462	16321	26487	4.25	0.0E+00	AI752561.1	EST_HUMAN	cn17d05.x1 Normal Human Trabecular Bone Cells Homo sapiens cDNA clone NHTBC_cn17d05 random
6499	16358	26530	1.59	0.0E+00	AF064205.1	NT	Homo sapiens dynactin 1 (DCTN1) gene, alternatively spliced products, exons 7 through 32 and complete cds
6499	16358	26531	1.59	0.0E+00	AF064205.1	NT	Homo sapiens dynactin 1 (DCTN1) gene, alternatively spliced products, exons 7 through 32 and complete cds
6515	16374	26551	1.3	0.0E+00	11417342	NT	Homo sapiens sema domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 5A (SEMA5A), mRNA
6530	16389	26569	1.98	0.0E+00	6912735	NT	Homo sapiens transient receptor potential channel 5 (TRPC5), mRNA
6534	16392	26571	5.37	0.0E+00	BF217905.1	EST_HUMAN	601885465F1 NIH_MGC_57 Homo sapiens cDNA clone IMAGE:4103729 5'
6539	16397	26576	2.98	0.0E+00	AU129622.1	EST_HUMAN	AU129622 NT2RP2 Homo sapiens cDNA clone NT2RP2005913 5'
6550	16408	26586	6.49	0.0E+00	4501848	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 3 (ABCA3), mRNA
6555	16413	26590	4.97	0.0E+00	BE739870.1	EST_HUMAN	601563156F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3947365 5'
6555	16413	26591	4.97	0.0E+00	BE739870.1	EST_HUMAN	601563156F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3947365 5'
6556	16414	26592	60.88	0.0E+00	AU120424.1	EST_HUMAN	AU120424 HEMBB1 Homo sapiens cDNA clone HEMBB1000665 5'
6566	16414	26593	60.88	0.0E+00	AU120424.1	EST_HUMAN	AU120424 HEMBB1 Homo sapiens cDNA clone HEMBB1000665 5'
6574	16432	26614	1.52	0.0E+00	BE787610.1	EST_HUMAN	601481713F1 NIH_MGC_88 Homo sapiens cDNA clone IMAGE:3884258 5'
6574	16432	26615	1.52	0.0E+00	BE787610.1	EST_HUMAN	601481713F1 NIH_MGC_88 Homo sapiens cDNA clone IMAGE:3884258 5'
6622	16502	26690	1.29	0.0E+00	AA149791.1	EST_HUMAN	z001c06.r1 Stratagene colon (#937204) Homo sapiens cDNA clone IMAGE:566410 5'
6645	16525	26719	3.72	0.0E+00	BE736046.1	EST_HUMAN	601305658F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3639903 5'
6654	16534	26729	3.97	0.0E+00	M34872.1	NT	Human amyloid-beta protein (APP) gene, exon 11
6654	16534	26730	3.97	0.0E+00	M34872.1	NT	Human amyloid-beta protein (APP) gene, exon 11
6674	16554	26749	1.65	0.0E+00	AA397551.1	EST_HUMAN	z81b04.r1 Stratagene schizo brain S11 Homo sapiens cDNA clone IMAGE:728719 5' similar to TR:G300482
6677	16557	26750	7.54	0.0E+00	AU142402.1	EST_HUMAN	G300482 POL-REVERSE TRANSCRIPTASE HOMOLOG (RETROVIRAL ELEMENT) ;
6688	16558	26750	8.73	0.0E+00	BF673096.1	EST_HUMAN	AU142402 Y79AA1 Homo sapiens cDNA clone Y79AA1000277 5'
6714	16594	26783	1.96	0.0E+00	AL120124.1	EST_HUMAN	602153008F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4294128 5'
6714	16594	26784	1.96	0.0E+00	AL120124.1	EST_HUMAN	DKFZp761P092_r1 761 (synonym: hamy2) Homo sapiens cDNA clone DKFZp761P092 5'
6730	16610	26784	1.31	0.0E+00	BE877693.1	EST_HUMAN	DKFZp761P092_r1 761 (synonym: hamy2) Homo sapiens cDNA clone DKFZp761P092 5'
6742	16621	26810	1.35	0.0E+00	AW500549.1	EST_HUMAN	601485254F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3887773 5'
6747	16626	26813	14.35	0.0E+00	AW157233.1	EST_HUMAN	UI-HF-BNO-ak4-f01-U1.r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3077496 5'
6775	16654	26842	1.16	0.0E+00	BE745597.1	EST_HUMAN	au93b08.x1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2783799 3' similar to TR:O60493
6775	16654	26843	1.16	0.0E+00	BE745597.1	EST_HUMAN	TR:O60493 O60463 TYPE-2 PHOSPHATIDIC ACID PHOSPHOHYDROLASE. [1];
6775	16654	26843	1.16	0.0E+00	BE745597.1	EST_HUMAN	601578195F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3926998 5'
6775	16654	26843	1.16	0.0E+00	BE745597.1	EST_HUMAN	601578195F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3926998 5'

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6783	16662	26852	2.72	0.0E+00	AJ271735.1	NT	Homo sapiens Xq pseudautosomal region, segment 1/2
6810	16689	26878	2.2	0.0E+00	BE674157.1	EST_HUMAN	7d76a04.x1 NCL_CGAP_Lu24 Homo sapiens cDNA clone IMAGE:3278862 3' similar to TR:O95793 O95793 STAUFEN PROTEIN ;
6811	16690	26879	1.36	0.0E+00	AI885671.1	EST_HUMAN	w160b10.x1 NCL_CGAP_Brn25 Homo sapiens cDNA clone IMAGE:2429275 3' similar to
6817	16696	26887	1.31	0.0E+00	BE563650.1	EST_HUMAN	SW:COGT_HUMAN P50281 MATRIX METALLOPROTEINASE-14 PRECURSOR ;
6817	16696	26888	1.31	0.0E+00	BE563650.1	EST_HUMAN	601334790F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3688655 5'
6824	16703	26897	1.44	0.0E+00	11427235	NT	601334790F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3688655 5'
6824	16703	26898	1.44	0.0E+00	11427235	NT	Homo sapiens Chediak-Higashi syndrome 1 (CHS1), mRNA
6851	16730		3.89	0.0E+00	AA398511.1	EST_HUMAN	Homo sapiens Chediak-Higashi syndrome 1 (CHS1), mRNA
6856	16735	26928	1.45	0.0E+00	AW364874.1	EST_HUMAN	z173a08.s1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:727958 3' similar to gb:S85655 PROHIBITIN (HUMAN);
6856	16735	26929	1.45	0.0E+00	AW364874.1	EST_HUMAN	QV3-DT0045-221299-046-c07 DT0045 Homo sapiens cDNA
6866	16748	26942	1.21	0.0E+00	BE612586.1	EST_HUMAN	QV3-DT0045-221299-046-c07 DT0045 Homo sapiens cDNA
6869	16748	26943	1.21	0.0E+00	BE612586.1	EST_HUMAN	601452412F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3856179 5'
6870	16758	26956	1.25	0.0E+00	AL163209.2	NT	601452412F1 NIH_MGC_66 Homo sapiens cDNA clone IMAGE:3856179 5'
6879	16759	26957	1.25	0.0E+00	AL163209.2	NT	Homo sapiens chromosome 21 segment HS21C009
6899	16778		2.01	0.0E+00	BE860797.1	EST_HUMAN	Homo sapiens chromosome 21 segment HS21C009
6913	16791	26984	2.4	0.0E+00	4758695	NT	601431238F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3916569 5'
6913	16791	26985	2.4	0.0E+00	4758695	NT	Homo sapiens mitogen-activated protein kinase kinase kinase 13 (MAP3K13), mRNA
6955	16833	27026	2.85	0.0E+00	X98922.1	NT	Homo sapiens mitogen-activated protein kinase kinase kinase 13 (MAP3K13), mRNA
6955	16833	27027	2.85	0.0E+00	X98922.1	NT	H. sapiens mRNA for gamma-glutamyltransferase
6955	16833	27028	2.85	0.0E+00	X98922.1	NT	H. sapiens mRNA for gamma-glutamyltransferase
6993	16870		1.36	0.0E+00	AW513513.1	EST_HUMAN	601431238F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3916569 5'
6995	16872	27063	3.64	0.0E+00	D52650.1	EST_HUMAN	601431238F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3916569 5'
7011	16888	27081	4.46	0.0E+00	BE378495.1	EST_HUMAN	601236488F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3608709 5'
7015	16892	27083	1.31	0.0E+00	AA410545.1	EST_HUMAN	z32e04.r1 Soares ovary tumor NbHOT Homo sapiens cDNA clone IMAGE:724062 5'
7015	16893		4.32	0.0E+00	BF513946.1	EST_HUMAN	601900571F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4129744 5'
7021	16898	27088	1.41	0.0E+00	AW139673.1	EST_HUMAN	U1-H-B1-adr-e-12-0-J1.s1 NCL_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2717687 3'
7021	16898	27089	1.41	0.0E+00	AW139673.1	EST_HUMAN	U1-H-B1-adr-e-12-0-J1.s1 NCL_CGAP_Sub3 Homo sapiens cDNA clone IMAGE:2717687 3'
7038	16915	27104	2.39	0.0E+00	BE260272.1	EST_HUMAN	601160051F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3502836 5'
7040	16917	27106	1.83	0.0E+00	BF700165.1	EST_HUMAN	602127664F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4284542 5'

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Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7040	16917	27107	1.83	0.0E+00	BF700165.1	EST_HUMAN	602127664F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4284542 5'
7040	16917	27108	1.83	0.0E+00	BF700165.1	EST_HUMAN	602127664F1 NIH_MGC_56 Homo sapiens cDNA clone IMAGE:4284542 5'
7069	16946	27137	6.35	0.0E+00	AA962527.1	EST_HUMAN	or80g02.s1 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1602194 3' similar to gb:M36072 60S RIBOSOMAL PROTEIN L7A (HUMAN);
7073	16950	27142	3.54	0.0E+00	10947037	NT	Homo sapiens ankyrin 1, erythrocytic (ANK1), transcript variant 1, mRNA
7073	16950	27143	3.54	0.0E+00	10947037	NT	Homo sapiens ankyrin 1, erythrocytic (ANK1), transcript variant 1, mRNA
7088	16965	27159	1.28	0.0E+00	Y11107.3	NT	Homo sapiens ITGB4 gene for integrin beta 4 subunit, exons 3-41
7095	16972		1.45	0.0E+00	AV718377.1	EST_HUMAN	AV718377 FHTB Homo sapiens cDNA clone FHTBAAAF11 5'
7099	16976	27169	3.64	0.0E+00	AW337277.1	EST_HUMAN	xw73c07.x1 NCI_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2833644 3' similar to gb:X53587
7102	16979	27171	1.57	0.0E+00	AU124051.1	EST_HUMAN	INTEGRIN BETA-4 SUBUNIT PRECURSOR (HUMAN);
7147	17024	27218	2.64	0.0E+00	AB007923.1	NT	AU124051 NT2RM2 Homo sapiens cDNA clone NT2RM2001575 5'
7148	17025	27219	4.41	0.0E+00	AW592233.1	EST_HUMAN	Homo sapiens mRNA for KIAA0454 protein, partial cds
7148	17025	27220	4.41	0.0E+00	AW592233.1	EST_HUMAN	hfa8a09.x1 Scores_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2935096 3'
7176	17053	27241	2.84	0.0E+00	AL040428.1	EST_HUMAN	hfa8a09.x1 Scores_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2935096 3'
7176	17053	27242	2.84	0.0E+00	AL040428.1	EST_HUMAN	DKFZp434C1814_s1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434C1814 3'
7177	17054	27243	1.17	0.0E+00	AF133901.1	NT	DKFZp434C1814_s1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434C1814 3'
7178	17055	27244	18.6	0.0E+00	AB040945.1	NT	Homo sapiens killer inhibitory receptor 2-2-1 (KIR221) and killer inhibitory receptor 2-2-2 (KIR222) genes, partial cds
7198	17075	27261	3.97	0.0E+00	11422857	NT	Homo sapiens mRNA for KIAA1512 protein, partial cds
7204	17081	27268	1.25	0.0E+00	K01241.1	NT	Homo sapiens tumor protein p73 (TP73), mRNA
7207	17084	27272	2.65	0.0E+00	AB020630.1	NT	Human Ig rearranged H-chain epsilon-3 pseudogene, constant region
7207	17084	27273	2.65	0.0E+00	AB020630.1	NT	Homo sapiens mRNA for KIAA0823 protein, partial cds
7210	17087	27277	1.96	0.0E+00	AV660739.1	EST_HUMAN	Homo sapiens mRNA for KIAA0823 protein, partial cds
7213	17090	27280	3.43	0.0E+00	7706638	NT	AV660739 GLC Homo sapiens cDNA clone GLOGK312 3'
7231	17108	27298	3.86	0.0E+00	BE315402.1	EST_HUMAN	Homo sapiens polycystin-L (PKDL), mRNA
7231	17108	27299	3.86	0.0E+00	BE315402.1	EST_HUMAN	Homo sapiens polycystin-L (PKDL), mRNA
7241	17118	27313	1.91	0.0E+00	X14766.1	NT	601141119F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3140740 5'
7250	17127	27320	2.12	0.0E+00	AJ954607.1	EST_HUMAN	601141119F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3140740 5'
7254	17131	27324	4.49	0.0E+00	9255595	NT	Human mRNA for GABA-A receptor, alpha 1 subunit
7263	17140	27333	1.54	0.0E+00	AW958311.1	EST_HUMAN	wq34a12.x1 NCI_CGAP_G06 Homo sapiens cDNA clone IMAGE:2473150 3' similar to SW:MGB3_HUMAN
7269	17146	27340	1.49	0.0E+00		NT	O15480 MELANOMA-ASSOCIATED ANTIGEN B3 ;
7280	17157	27352	6.88	0.0E+00	11436995	NT	Homo sapiens protocadherin alpha 8 (PCDH8), mRNA
							EST370381 IMAGE resequences, IMAGE Homo sapiens cDNA
							Human endogenous retrovirus, complete genome
							Homo sapiens MAP-kinase activating death domain (MADD), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7290	17166	27365	1.44	0.0E+00	AB011150.1	NT	Homo sapiens mRNA for KIAA0578 protein, partial cds
7291	17167	27366	2.56	0.0E+00	BE794923.1	EST_HUMAN	601589294F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3943463 5'
7298	17174	27374	1.24	0.0E+00	BE883843.1	EST_HUMAN	601510247F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3911986 5'
7298	17174	27375	1.24	0.0E+00	BE883843.1	EST_HUMAN	601510247F1 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3911986 5'
7308	17184	27383	1.6	0.0E+00	AA344601.1	EST_HUMAN	EST150505 Gall bladder 1 Homo sapiens cDNA 5' end
7308	17184	27384	1.6	0.0E+00	AA344601.1	EST_HUMAN	EST150505 Gall bladder 1 Homo sapiens cDNA 5' end
7360	17227	27426	1.38	0.0E+00	BE207063.1	EST_HUMAN	ba09f05.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823873 5' similar to gb:L35049 Mus musculus Bcl-xL mRNA, complete cds (MOUSE);
7360	17227	27427	1.38	0.0E+00	BE207063.1	EST_HUMAN	ba09f05.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823873 5' similar to gb:L35049 Mus musculus Bcl-xL mRNA, complete cds (MOUSE);
7368	17346	27551	2.71	0.0E+00	BF348013.1	EST_HUMAN	602023160F1 NCI_CGAP_Bm67 Homo sapiens cDNA clone IMAGE:4168300 5'
7383	17282	27457	3	0.0E+00	BE712515.1	EST_HUMAN	QV2-HT0698-250700-282-b08 HT0698 Homo sapiens cDNA
7406	17273	27479	11.81	0.0E+00	AL042278.1	EST_HUMAN	DKFZp434L0120_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434L0120 5'
7425	17292	27503	1.27	0.0E+00	AI088043.1	EST_HUMAN	ow60h01.x1 Soares NSF F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:1651249 3' similar to TR:Q14677 Q14677 KIAA0171 PROTEIN.;
7429	16442	26628	2.06	0.0E+00	11560151	NT	Homo sapiens hypothetical C2H2 zinc finger protein FLJ22504 (FLJ22504), mRNA
7429	16442	26629	2.06	0.0E+00	11560151	NT	Homo sapiens hypothetical C2H2 zinc finger protein FLJ22504 (FLJ22504), mRNA
7431	16444	26632	8.86	0.0E+00	AI290909.1	EST_HUMAN	qm09a06.x1 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1881298 3' similar to SW:RL2B_HUMAN P29316 60S RIBOSOMAL PROTEIN L23A.;
7431	16444	26633	8.86	0.0E+00	AI290909.1	EST_HUMAN	qm09a06.x1 NCI_CGAP_Lu5 Homo sapiens cDNA clone IMAGE:1881298 3' similar to SW:RL2B_HUMAN P29316 60S RIBOSOMAL PROTEIN L23A.;
7432	16445	26634	1.69	0.0E+00	AW953836.1	EST_HUMAN	EST365026 MAGC resequences, MAGC Homo sapiens cDNA
7450	17259	27464	3.92	0.0E+00	AF153466.1	NT	Homo sapiens polycystic kidney disease 2-like protein (PKD2L) gene, exon 8
7461	17321	27529	4.9	0.0E+00	BE255829.1	EST_HUMAN	601103042F1 NIH_MGC_16 Homo sapiens cDNA clone IMAGE:3350722 5'
7463	17323	27529	1.37	0.0E+00	BE781382.1	EST_HUMAN	601466828F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3870007 5'
7463	17323	27530	1.37	0.0E+00	BE781382.1	EST_HUMAN	601466828F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3870007 5'
7464	17324	27531	7.21	0.0E+00	AW163779.1	EST_HUMAN	au86c04.y1 Schneider fetal brain 00004 Homo sapiens cDNA clone IMAGE:2783142 5' similar to gb:M36072 60S RIBOSOMAL PROTEIN L7A (HUMAN);
7475	17335	27541	2.85	0.0E+00	BE263191.1	EST_HUMAN	601145054F2 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3160477 5'
7488	17358	27562	3.98	0.0E+00	C06158.1	EST_HUMAN	C06158 Human pancreatic islet Homo sapiens cDNA clone hbc5605
7488	17358	27563	3.98	0.0E+00	C06158.1	EST_HUMAN	C06158 Human pancreatic islet Homo sapiens cDNA clone hbc5605
7490	17360	27566	3.22	0.0E+00	BE746215.1	EST_HUMAN	601578683F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3927548 5'
7499	17369	27574	1.93	0.0E+00	11437282	NT	Homo sapiens solute carrier family 21 (organic anion transporter), member 9 (SLC21A9), mRNA
7499	17369	27575	1.93	0.0E+00	11437282	NT	Homo sapiens solute carrier family 21 (organic anion transporter), member 9 (SLC21A9), mRNA

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7499	17369	27576	1.93	0.0E+00	11437282	NT	Homo sapiens solute carrier family 21 (organic anion transporter), member 9 (SLC21A9), mRNA
7514	17302	27509	1.47	0.0E+00	BE900549.1	EST_HUMAN	601673425F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3966238 5'
7530	17381	27591	2.59	0.0E+00	AF019084.1	NT	Homo sapiens keratin 2e (KRT2E) gene, complete cds
7530	17381	27592	2.59	0.0E+00	AF019084.1	NT	Homo sapiens keratin 2e (KRT2E) gene, complete cds
7548	17399	27612	1.47	0.0E+00	BE082977.1	EST_HUMAN	RC2-BT0842-130300-017-g01 BT0842 Homo sapiens cDNA
7559	17410	27626	1.76	0.0E+00	AW500293.1	EST_HUMAN	UI-HF-BN0-akg-b-12-O-U1.r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3076943 5'
7559	17410	27627	1.76	0.0E+00	AW500293.1	EST_HUMAN	UI-HF-BN0-akg-b-12-O-U1.r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3076943 5'
7563	17414	27629	1.25	0.0E+00	AF029308.1	NT	Homo sapiens chromosome 9 duplication of the T cell receptor beta locus and tyrosinogen gene families
7563	17414	27630	1.25	0.0E+00	AF029308.1	NT	Homo sapiens chromosome 9 duplication of the T cell receptor beta locus and tyrosinogen gene families
7580	17431	27645	2.45	0.0E+00	AW500526.1	EST_HUMAN	UI-HF-BN0-akg-b-07-O-U1.r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3077364 5'
7607	17458	27673	1.34	0.0E+00	AF009668.1	NT	Multiple sclerosis associated retrovirus polyprotein (pol) mRNA, partial cds
7621	17472	27691	2.56	0.0E+00	S78466.1	NT	ALGF=androgen-induced growth factor ALGF [human, placenta, Genomic/mRNA, 498 nt, segment 5 of 5]
7621	17472	27692	2.56	0.0E+00	S78466.1	NT	ALGF=androgen-induced growth factor ALGF [human, placenta, Genomic/mRNA, 498 nt, segment 5 of 5]
7622	17473	27693	2.57	0.0E+00	BE583320.1	EST_HUMAN	601334603F1 NIH_MGC_39 Homo sapiens cDNA clone IMAGE:3988680 5'
7630	17481	27701	1.62	0.0E+00	AW363135.1	EST_HUMAN	GM2-CT0311-301199-043-h11 CT0311 Homo sapiens cDNA
7650	17500	27722	2.17	0.0E+00	AU132349.1	EST_HUMAN	AU132349 NT2RP3 Homo sapiens cDNA clone NT2RP3004260 5'
7650	17500	27723	2.17	0.0E+00	AU132349.1	EST_HUMAN	AU132349 NT2RP3 Homo sapiens cDNA clone NT2RP3004260 5'
7659	17509	27734	7.73	0.0E+00	BE740490.1	EST_HUMAN	601595559F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3949383 5'
7659	17509	27735	7.73	0.0E+00	BE740490.1	EST_HUMAN	601595559F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3949383 5'
7666	17516	27743	1.76	0.0E+00	7662067	NT	Homo sapiens KIAA0345 gene product (KIAA0345), mRNA
7682	17532	27756	2.22	0.0E+00	AU132349.1	EST_HUMAN	AU132349 NT2RP3 Homo sapiens cDNA clone NT2RP3004260 5'
7683	17533	27757	1.86	0.0E+00	AF152308.1	NT	Homo sapiens protocadherin alpha 12 (PCDH-alpha12) mRNA, complete cds
7701	17551	27776	2.72	0.0E+00	AF009220.1	NT	Homo sapiens leucocyte immunoglobulin-like receptor-1 mRNA, complete cds
7701	17551	27777	2.72	0.0E+00	AF009220.1	NT	Homo sapiens leucocyte immunoglobulin-like receptor-1 mRNA, complete cds
7708	17558	27784	1.65	0.0E+00	BF092898.1	EST_HUMAN	MR4-TN0114-110900-101-e04 TN0114 Homo sapiens cDNA
7720	17570	27795	2.44	0.0E+00	BE280793.1	EST_HUMAN	601155227F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3138798 5'
7728	17578	27800	1.74	0.0E+00	AW236259.1	EST_HUMAN	xn72801.x1 NCL_CGAP_CML1 Homo sapiens cDNA clone IMAGE:2699977 3' similar to gb:X02152_cds1 L-LACTATE DEHYDROGENASE M CHAIN (HUMAN);
7736	17586	27810	1.91	0.0E+00	11427235	NT	Homo sapiens Chediak-Higashi syndrome 1 (CHS1), mRNA
7753	17603	27826	5.98	0.0E+00	AU143673.1	EST_HUMAN	AU143673 Y79AA1 Homo sapiens cDNA clone Y79AA1002307 5'

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
7753	17603	27827	5.98	0.0E+00	AU143673.1	EST_HUMAN	AU143673 Y79AA1 Homo sapiens cDNA clone Y79AA1002307 5'
7756	17606	27830	7.52	0.0E+00	AF072408.1	NT	Homo sapiens killer cell inhibitory receptor KIRCI gene, exons 2, 3, and 4
7758	17608	27832	2.48	0.0E+00	11421001	NT	Homo sapiens HEF like Protein (HEFL), mRNA
7758	17608	27833	2.48	0.0E+00	11421001	NT	Homo sapiens HEF like Protein (HEFL), mRNA
7755	17635	27868	2.96	0.0E+00	AU136637.1	EST_HUMAN	AU136637 PLACE1 Homo sapiens cDNA clone PLACE1004737 5'
7755	17635	27869	2.96	0.0E+00	AU136637.1	EST_HUMAN	AU136637 PLACE1 Homo sapiens cDNA clone PLACE1004737 5'
7795	17645	27879	2.13	0.0E+00	AJ295844.1	NT	Homo sapiens partial RANBP7 gene for RanBP7/importin7 and partial ZNF143 gene
7795	17645	27880	2.13	0.0E+00	AJ295844.1	NT	Homo sapiens partial RANBP7 gene for RanBP7/importin7 and partial ZNF143 gene
7804	17654	27892	4.01	0.0E+00	AA196387.1	EST_HUMAN	zp97h11.1 Stragene muscle 937209 Homo sapiens cDNA clone IMAGE:628197 5'
7823	17673	27915	1.17	0.0E+00	AA131248.1	EST_HUMAN	z31f01.1 Soares pregnant uterus NhlPU Homo sapiens cDNA clone IMAGE:503545 5'
7823	17673	27916	1.17	0.0E+00	AA131248.1	EST_HUMAN	z31f01.1 Soares pregnant uterus NhlPU Homo sapiens cDNA clone IMAGE:503545 5'
7842	17692	27937	1.46	0.0E+00	AF179308.1	NT	Homo sapiens KIF4 (KIF4) mRNA, complete cds
7855	17715	27959	3.45	0.0E+00	BE730772.1	EST_HUMAN	601570712F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3845403 5'
7855	17715	27960	3.45	0.0E+00	BE730772.1	EST_HUMAN	601570712F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3845403 5'
7892	17742	27985	1.24	0.0E+00	11560151	NT	Homo sapiens hypothetical C2H2 zinc finger protein FLJ22504 (FLJ22504), mRNA
7897	17747	27987	1.64	0.0E+00	AB029290.1	NT	Homo sapiens mRNA for actin binding protein ABP020, complete cds
7903	17753	27991	5.19	0.0E+00	AB006590.1	NT	Homo sapiens mRNA for estrogen receptor beta, complete cds
7903	17753	27992	5.19	0.0E+00	AB006590.1	NT	Homo sapiens mRNA for estrogen receptor beta, complete cds
7904	17754	27993	3.27	0.0E+00	AA194770.1	EST_HUMAN	zq06h11.1 Stragene muscle 937209 Homo sapiens cDNA clone IMAGE:628965 5' similar to TR:G407097 G407097 16SKD PROTEIN. ;
7905	17755	27994	5.43	0.0E+00	BF340331.1	EST_HUMAN	602037045F1 NCI_CGAP_Brn64 Homo sapiens cDNA clone IMAGE:4184939 5'
7905	17755	27995	5.43	0.0E+00	BF340331.1	EST_HUMAN	602037045F1 NCI_CGAP_Brn64 Homo sapiens cDNA clone IMAGE:4184939 5'
7946	17796	28036	1.37	0.0E+00	T03078.1	EST_HUMAN	FB23A4 Fetal brain, Stragene Homo sapiens cDNA clone FB23A4 3'end
7972	17822	28065	2.35	0.0E+00	BF436218.1	EST_HUMAN	hab45e12.x1 Soares NSF_F8_9W_O1_PA_P_S1 Homo sapiens cDNA clone IMAGE:3285271 3'
7973	17823		2.05	0.0E+00	AV654765.1	EST_HUMAN	AV654765 GLC Homo sapiens cDNA clone GLCZC07 3'
7982	17832	28072	3.55	0.0E+00	AW517960.1	EST_HUMAN	xu74b01.x1 NCI_CGAP_Kid8 Homo sapiens cDNA clone IMAGE:2807401 3' similar to gb:M69066 MDESIN (HUMAN);
7984	17834	28074	6.06	0.0E+00	BE549213.1	EST_HUMAN	601078764F1 NIH_MGC_12 Homo sapiens cDNA clone IMAGE:3464703 5'
8001	17851	28092	1.65	0.0E+00	BE781742.1	EST_HUMAN	601467419F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3870700 5'
8008	17858	28101	2.23	0.0E+00	BE082720.1	EST_HUMAN	RC2-BT0642-150200-012-c03 BT0642 Homo sapiens cDNA
8008	17858	28102	2.23	0.0E+00	BE082720.1	EST_HUMAN	RC2-BT0642-150200-012-c03 BT0642 Homo sapiens cDNA
8015	17865	28111	1.69	0.0E+00	BE743215.1	EST_HUMAN	601573895F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3835198 5'
8015	17865	28112	1.69	0.0E+00	BE743215.1	EST_HUMAN	601573895F1 NIH_MGC_9 Homo sapiens cDNA clone IMAGE:3835198 5'
8032	17924	28170	2.33	0.0E+00	AV711075.1	EST_HUMAN	AV711075 Cu Homo sapiens cDNA clone CuAAKG05 5'

Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8032	17924	28171	2.33	0.0E+00	AV711075.1	EST_HUMAN	AV711075 Cu Homo sapiens cDNA clone CuAAKG05 5'
8034	17926		6.11	0.0E+00	AW813783.1	EST_HUMAN	RC3-ST0197-120200-015-e03 ST0197 Homo sapiens cDNA
8040	17931	28178	6.43	0.0E+00	AW963563.1	EST_HUMAN	EST1375636 MAGE resequences, MAGH Homo sapiens cDNA
8051	17942	28191	2.5	0.0E+00	11431124	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 3 (ABCA3), mRNA
8051	17942	28192	2.5	0.0E+00	11431124	NT	Homo sapiens ATP-binding cassette, sub-family A (ABC1), member 3 (ABCA3), mRNA
8054	17945	28195	1.99	0.0E+00	AW057621.1	EST_HUMAN	wy61f09.x1 Soares NSF_F8_9W_OT_PA_P_S1 Homo sapiens cDNA clone IMAGE:2553065 3' similar to TR:Q60566 Q60566 VDX;
8059	17950	28200	1.92	0.0E+00	BE243270.1	EST_HUMAN	TCAAP3D0917 Pediatric acute myelogenous leukemia cell (FAB M1) Baylor-HGSC project=TCAA Homo sapiens cDNA clone TCAAP0917
8060	17951	28201	4.86	0.0E+00	AI652239.1	EST_HUMAN	wb28a12.x1 NCI CGAP_G08 Homo sapiens cDNA clone IMAGE:2306974 3' similar to contains element MSR1 MSR1 repetitive element;
8060	17951	28202	4.86	0.0E+00	AI652239.1	EST_HUMAN	wb28a12.x1 NCI CGAP_G08 Homo sapiens cDNA clone IMAGE:2306974 3' similar to contains element MSR1 MSR1 repetitive element;
8068	17959	28209	2.91	0.0E+00	11545911	NT	Homo sapiens NOD2 protein (NOD2), mRNA
8068	17959	28210	2.91	0.0E+00	11545911	NT	Homo sapiens NOD2 protein (NOD2), mRNA
8081	17972	28221	2.01	0.0E+00	AW404795.1	EST_HUMAN	UI-HF-BLO-acm-d-04-0-UI.r1 NIH_MGC_37 Homo sapiens cDNA clone IMAGE:3059383 5'
8084	17975	28224	4.8	0.0E+00	11424829	NT	Homo sapiens hypothetical protein FLJ20079 (FLJ20079), mRNA
8085	17976	28225	9.16	0.0E+00	4504536	NT	Homo sapiens 5-hydroxytryptamine (serotonin) receptor 1E (HTR1E) mRNA
8085	17976	28226	9.16	0.0E+00	4504536	NT	Homo sapiens 5-hydroxytryptamine (serotonin) receptor 1E (HTR1E) mRNA
8086	17977	28227	2.73	0.0E+00	AI991827.1	EST_HUMAN	wu32b05.x1 Soares Dieckgraefe_colon_NHCD Homo sapiens cDNA clone IMAGE:2521715 3'
8089	17980	28231	3.04	0.0E+00	BE882109.1	EST_HUMAN	601508204F2 NIH_MGC_71 Homo sapiens cDNA clone IMAGE:3906865 5'
8093	17984	28233	10.56	0.0E+00	BE891630.1	EST_HUMAN	601434522F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3919636 5'
8095	17986	28234	22.36	0.0E+00	8923939	NT	Homo sapiens myosin, heavy polypeptide 2, skeletal muscle, adult (MYH2), mRNA
8095	17986	28235	22.36	0.0E+00	8923939	NT	Homo sapiens myosin, heavy polypeptide 2, skeletal muscle, adult (MYH2), mRNA
8110	18000	28247	1.91	0.0E+00	BE903304.1	EST_HUMAN	601674332F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3957943 5'
8113	15448	25515	4.05	0.0E+00	AA195905.1	EST_HUMAN	zp95b11.r1 Stralagene muscle 937209 Homo sapiens cDNA clone IMAGE:627933 5' similar to gb:X03740
8134	18022	28269	4.69	0.0E+00	BE793498.1	EST_HUMAN	MYOSIN HEAVY CHAIN, SKELETAL MUSCLE (HUMAN);
8143	18031	28277	6.8	0.0E+00	AV727362.1	EST_HUMAN	601588829F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3943015 5'
8143	18031	28278	6.8	0.0E+00	AV727362.1	EST_HUMAN	AV727362 HTC Homo sapiens cDNA clone HTCAQH06 5'
8156	18044	28296	17.96	0.0E+00	AW518055.1	EST_HUMAN	AV727362 HTC Homo sapiens cDNA clone HTCAQH06 5'
8161	18049	28301	2.17	0.0E+00	AU135741.1	EST_HUMAN	xy04q10.x1 NCI CGAP_Lym12 Homo sapiens cDNA clone IMAGE:2852226 3' similar to gb:M60854 40S RIBOSOMAL PROTEIN S16 (HUMAN);

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8166	18054	28304	3.45	0.0E+00	AW593333.1	EST_HUMAN	hg13d02.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2945475 3' similar to contains element MSR1 repetitive element;
8166	18054	28305	3.45	0.0E+00	AW593333.1	EST_HUMAN	hg13d02.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2945475 3' similar to contains element MSR1 repetitive element;
8166	18054	28306	3.45	0.0E+00	AW593333.1	EST_HUMAN	hg13d02.x1 Soares_NFL_T_GBC_S1 Homo sapiens cDNA clone IMAGE:2945475 3' similar to contains element MSR1 repetitive element;
8168	18056	28307	1.82	0.0E+00	Z34897.1	NT	H.sapiens mRNA for H1 histamine receptor
8169	18057	28308	2.8	0.0E+00	F13069.1	EST_HUMAN	HSC3IC031 normalized infant brain cDNA Homo sapiens cDNA clone c-3ic03
8176	18064	28313	2.12	0.0E+00	D10083.1	NT	Homo sapiens RGH1 gene, retrovirus-like element
8191	18077	28328	2.92	0.0E+00	AW338094.1	EST_HUMAN	xm66f01.x1 NCL_CGAP_Pan1 Homo sapiens cDNA clone IMAGE:2832985 3' similar to gb.X17115 IG MU CHAIN C REGION (HUMAN);
8192	18078	28329	5.94	0.0E+00	AW451230.1	EST_HUMAN	UI-H-B13-alf-a-01-0-UI.st NCL_CGAP_Sub5 Homo sapiens cDNA clone IMAGE:2736649 3'
8192	18078	28330	5.94	0.0E+00	AW451230.1	EST_HUMAN	UI-H-B13-alf-a-01-0-UI.st NCL_CGAP_Sub5 Homo sapiens cDNA clone IMAGE:2736649 3'
8194	10179		14.21	0.0E+00	4506632	NT	Homo sapiens ribosomal protein L31 (RPL31) mRNA
8196	18081	28332	2.03	0.0E+00	AB014567.1	NT	Homo sapiens mRNA for KIAA0687 protein, partial cds
8208	18092	28346	2.35	0.0E+00	BE298449.1	EST_HUMAN	601119246F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3029219 5'
8224	18106	28359	1.88	0.0E+00	AB011117.1	NT	Homo sapiens mRNA for KIAA0545 protein, partial cds
8227	18109	28363	59.52	0.0E+00	Z20656.1	NT	Homo sapiens of cardiac alpha-myosin heavy chain gene
8240	18120	28371	3.47	0.0E+00	BE792155.1	EST_HUMAN	601582046F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3936539 5'
8241	18121		25.37	0.0E+00	BF684081.1	EST_HUMAN	602141405F1 NIH_MGC_46 Homo sapiens cDNA clone IMAGE:4302432 5'
8244	18124	28374	6.16	0.0E+00	AU118386.1	EST_HUMAN	AU118386 HEMBA1 Homo sapiens cDNA clone HEMBA1003486 5'
8245	18125		2.72	0.0E+00	AW236269.1	EST_HUMAN	xn72b01.x1 NCL_CGAP_CML1 Homo sapiens cDNA clone IMAGE:2699977 3' similar to gb.X02152_cds1 L-LACTATE DEHYDROGENASE M CHAIN (HUMAN);
8250	18130	28378	6.77	0.0E+00	A1149809.1	EST_HUMAN	qf43c03.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1752772 3'
8250	18130	28379	6.77	0.0E+00	A1149809.1	EST_HUMAN	qf43c03.x1 Soares_testis_NHT Homo sapiens cDNA clone IMAGE:1752772 3'
8251	18131	28380	3.05	0.0E+00	AW391937.1	EST_HUMAN	QV4-ST0234-121199-032-b06 ST0234 Homo sapiens cDNA
8262	18142		4.62	0.0E+00	AU116908.1	EST_HUMAN	AU116908 HEMBA1 Homo sapiens cDNA clone HEMBA1000255 5'
8265	18145	28386	18.63	0.0E+00	11424726	NT	Homo sapiens insulin receptor (INSR), mRNA
8271	18151	28392	1.78	0.0E+00	AW804516.1	EST_HUMAN	QV0-UM0093-170400-191-406 UM0093 Homo sapiens cDNA
8271	18151	28393	1.78	0.0E+00	AW804516.1	EST_HUMAN	QV0-UM0093-170400-191-406 UM0093 Homo sapiens cDNA
8272	18152	28394	2.14	0.0E+00	BF340308.1	EST_HUMAN	602037014F1 NCL_CGAP_Bn64 Homo sapiens cDNA clone IMAGE:4184979 5'
8273	18153	28395	49.5	0.0E+00	BE261209.1	EST_HUMAN	601148357F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3163310 5'
8282	18161	28403	2.53	0.0E+00	U50326.1	NT	Human protein kinase C substrate 80K-H (PRKCSH) gene, exon 15-17
8283	18162	28404	68.7	0.0E+00	Z20666.1	NT	Homo sapiens of cardiac alpha-myosin heavy chain gene

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8287	18166	28409	3.52	0.0E+00	BE773036.1	EST_HUMAN	RC1-FT0134-170700-012-f07 FT0134 Homo sapiens cDNA
8287	18166	28410	3.52	0.0E+00	BE773036.1	EST_HUMAN	RC1-FT0134-170700-012-f07 FT0134 Homo sapiens cDNA
8307	18184	28431	24.55	0.0E+00	AA740782.1	EST_HUMAN	ob32e07.s1 NCI_CGAP_Kid5 Homo sapiens cDNA clone IMAGE:1325412 3' similar to contains element
8313	18190	28439	3.12	0.0E+00	AF252303.1	NT	MSR1 repetitive element ;
8326	18203	28452	149.55	0.0E+00	C05089.1	EST_HUMAN	Homo sapiens signaling lymphocytic activation molecule (SLAMF) gene, exon 2
8333	18210	28460	2.17	0.0E+00	AA746375.1	EST_HUMAN	C05089 Human heart cDNA (YNakamura) Homo sapiens cDNA clone 3NHC4817
8333	18210	28461	2.17	0.0E+00	AA746375.1	EST_HUMAN	oa56h01.r1 NCI_CGAP_GOB1 Homo sapiens cDNA clone IMAGE:1309009 5'
8341	18218	28470	2.41	0.0E+00	M78448.1	EST_HUMAN	oa56h01.r1 NCI_CGAP_GOB1 Homo sapiens cDNA clone IMAGE:1309009 5'
8341	18218	28471	2.41	0.0E+00	M78448.1	EST_HUMAN	EST00596 Fetal brain, Stratagene (cat#936206) Homo sapiens cDNA clone HFBCC26
8344	18221	28472	1.92	0.0E+00	BF353625.1	EST_HUMAN	EST00596 Fetal brain, Stratagene (cat#936206) Homo sapiens cDNA clone HFBCC26
8345	18222	28473	8.08	0.0E+00	AL157608.1	EST_HUMAN	QV2-HT0698-020800-295-d07 HT0698 Homo sapiens cDNA
8357	18234	28482	10.53	0.0E+00	AJ116988.1	EST_HUMAN	DKFZp761J2116.1 r1 761 (synonym: hamy2) Homo sapiens cDNA clone DKFZp761J2116 5'
8375	18252	28503	1.96	0.0E+00	BF366553.1	EST_HUMAN	AJ116988 HEMBA1 Homo sapiens cDNA clone HEMBA1000424 5'
8395	18271	28523	3.78	0.0E+00	BE182360.1	EST_HUMAN	IL3-NT0104-200500-143-A07 NT0104 Homo sapiens cDNA
8395	18271	28524	3.78	0.0E+00	BE182360.1	EST_HUMAN	PM0-HT0645-060500-002-E05 HT0645 Homo sapiens cDNA
8405	18281	28533	3.46	0.0E+00	BE896423.1	EST_HUMAN	PM0-HT0645-060500-002-E05 HT0645 Homo sapiens cDNA
8410	18285	28539	1.74	0.0E+00	AW500307.1	EST_HUMAN	PM0-HT0645-060500-002-E05 HT0645 Homo sapiens cDNA
8410	18285	28540	1.74	0.0E+00	AW500307.1	EST_HUMAN	UI-HF-BNO-akg-d-02-0-UJ.r1 NIH_MGC 50 Homo sapiens cDNA clone IMAGE:3077019 5'
8442	18316	28574	4	0.0E+00	BE897953.1	EST_HUMAN	UI-HF-BNO-akg-d-02-0-UJ.r1 NIH_MGC 50 Homo sapiens cDNA clone IMAGE:3077019 5'
8443	18317	28575	1.96	0.0E+00	A1459545.1	EST_HUMAN	601440446F1 NIH_MGC 72 Homo sapiens cDNA clone IMAGE:3925403 5'
8443	18317	28576	1.96	0.0E+00	A1459545.1	EST_HUMAN	ao86g11.x1 Schiller meningioma Homo sapiens cDNA clone IMAGE:1952804 3'
8455	18328	28587	88.73	0.0E+00	F00884.1	EST_HUMAN	ao86g11.x1 Schiller meningioma Homo sapiens cDNA clone IMAGE:1952804 3'
8455	18328	28588	88.73	0.0E+00	F00884.1	EST_HUMAN	HSB77E122 STRATAGENE Human skeletal muscle cDNA library, cat. #936215, Homo sapiens cDNA clone 77E12
8480	18353	28618	3.88	0.0E+00	4758827	NT	HSB77E122 STRATAGENE Human skeletal muscle cDNA library, cat. #936215, Homo sapiens cDNA clone 77E12
8481	18354	28619	4.54	0.0E+00	BF206561.1	EST_HUMAN	Homo sapiens neurexin III (NRXN3) mRNA
8483	18356	28620	16	0.0E+00	AW207734.1	EST_HUMAN	601870902F1 NIH_MGC 19 Homo sapiens cDNA clone IMAGE:4101433 5'
8484	18357	28621	3.77	0.0E+00	AW604975.1	EST_HUMAN	UI-H-B12-age-h-01-0-UJ.s1 NCI_CGAP_Sub4 Homo sapiens cDNA clone IMAGE:2724312 3'
8484	18357	28622	3.77	0.0E+00	AW604975.1	EST_HUMAN	RC0-CT0380-210100-032-c10 CT0380 Homo sapiens cDNA
8488	18361	28625	6.91	0.0E+00	AB018260.1	NT	RC0-CT0380-210100-032-c10 CT0380 Homo sapiens cDNA
8488	18361	28626	6.91	0.0E+00	AB018260.1	NT	Homo sapiens mRNA for KIAA0717 protein, partial cds
8488	18361	28626	6.91	0.0E+00	AB018260.1	NT	Homo sapiens mRNA for KIAA0717 protein, partial cds

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8490	18363	28628	2.59	0.0E+00	BE206846.1	EST_HUMAN	ba04407.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823373 5' similar to TR:O76022 O76022 E/IB-55KDA-ASSOCIATED PROTEIN. ;
8490	18363	28629	2.59	0.0E+00	BE206846.1	EST_HUMAN	ba04407.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823373 5' similar to TR:O76022 O76022 E/IB-55KDA-ASSOCIATED PROTEIN. ;
8511	18383	28648	2.85	0.0E+00	11024711	NT	Homo sapiens myosin, heavy polypeptide 4, skeletal muscle (MYH4), mRNA
8514	18386	28651	2.01	0.0E+00	BF093687.1	EST_HUMAN	QV0-UM0091-120900-385-b72 UM0091 Homo sapiens cDNA
8518	18390	28653	2.9	0.0E+00	BE148076.1	EST_HUMAN	RC3-HT0230-040500-110-h04 HT0230 Homo sapiens cDNA
8518	18390	28654	2.9	0.0E+00	BE148076.1	EST_HUMAN	RC3-HT0230-040500-110-h04 HT0230 Homo sapiens cDNA
8526	18398	28665	6.47	0.0E+00	AA195905.1	EST_HUMAN	zp95b11.r1 Stratiogene muscle 937209 Homo sapiens cDNA clone IMAGE:627933 5' similar to gb.X03740 MYOSIN HEAVY CHAIN, SKELETAL MUSCLE (HUMAN);
8546	18418	28687	4.47	0.0E+00	BF507876.1	EST_HUMAN	UI-H-BI4-aok-b-10-0-UI.s1 NCI CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3085026 3'
8546	18418	28688	4.47	0.0E+00	BF507876.1	EST_HUMAN	UI-H-BI4-aok-b-10-0-UI.s1 NCI CGAP_Sub8 Homo sapiens cDNA clone IMAGE:3085026 3'
8553	18423	28692	2.16	0.0E+00	AU135170.1	EST_HUMAN	AU135170 PLACE1 Homo sapiens cDNA clone PLACE1001381 5'
8557	18427	28696	5.62	0.0E+00	BE876401.1	EST_HUMAN	601486828F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3889207 5'
8557	18427	28697	5.62	0.0E+00	BE876401.1	EST_HUMAN	601486828F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3889207 5'
8566	18435		10.32	0.0E+00	BE240536.1	EST_HUMAN	601875630F1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:4099710 5'
8577	18445	28713	3.05	0.0E+00	AB037737.1	NT	Homo sapiens mRNA for KIAA1316 protein, partial cds
8577	18445	28714	3.05	0.0E+00	AB037737.1	NT	Homo sapiens mRNA for KIAA1316 protein, partial cds
8581	18449	28717	3.49	0.0E+00	11430868	NT	Homo sapiens retinoblastoma-like 2 (p130) (RBL2), mRNA
8581	18449	28718	3.49	0.0E+00	11430868	NT	Homo sapiens retinoblastoma-like 2 (p130) (RBL2), mRNA
8596	18463	28734	6.1	0.0E+00	4503544	NT	Homo sapiens eukaryotic translation initiation factor 5A (EIF5A) mRNA
8603	18470	28741	2.49	0.0E+00	BF576267.1	EST_HUMAN	602134132F1 NIH_MGC_81 Homo sapiens cDNA clone IMAGE:4289502 5'
8605	18472	28744	5.44	0.0E+00	AW328173.1	EST_HUMAN	dr04g05.x1 NIH_MGC_3 Homo sapiens cDNA clone IMAGE:2847177 5'
8608	18475		120.65	0.0E+00	M55083.1	NT	Human gamma actin-like pseudogene, complete cds
8612	18479	28750	3.18	0.0E+00	AI660988.1	EST_HUMAN	wf20e11.x1 Soares_Dieckgraefe_colon_NHUC Homo sapiens cDNA clone IMAGE:2351180 3' similar to gb.M87789 IG GAMMA-1 CHAIN C REGION (HUMAN);
8614	18481	28752	3.64	0.0E+00	BF308996.1	EST_HUMAN	601889823F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4123948 5'
8614	18481	28753	3.64	0.0E+00	BF308996.1	EST_HUMAN	601889823F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4123948 5'
8620	18486	28758	26.88	0.0E+00	BF362462.1	EST_HUMAN	QV2-NN0054-230800-333-e04 NN0054 Homo sapiens cDNA
8639	18504		4.07	0.0E+00	BE897051.1	EST_HUMAN	601439605F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3924577 5'
8648	18512	28793	2.89	0.0E+00	8923698	NT	Homo sapiens golgin-like protein (GLP), mRNA
8650	18514		2.24	0.0E+00	BF207662.1	EST_HUMAN	601861947F1 NIH_MGC_53 Homo sapiens cDNA clone IMAGE:4081715 5'
8651	18550	28833	4.61	0.0E+00	BE206846.1	EST_HUMAN	ba04407.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823373 5' similar to TR:O76022 O76022 E/IB-55KDA-ASSOCIATED PROTEIN. ;

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Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8661	18550	28834	4.61	0.0E+00	BE208846.1	EST_HUMAN	ba04c07.y1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:2823373 5' similar to TR:O76022 O76022 E7B-55KDA-ASSOCIATED PROTEIN.;
8663	18552	28836	3	0.0E+00	AW753028.1	EST_HUMAN	QV0-CT0225-101299-071-06 CT0225 Homo sapiens cDNA
8668	18557		2.36	0.0E+00	AA558707.1	EST_HUMAN	h42c08.s1 NCL_CGAP_P14 Homo sapiens cDNA clone IMAGE:1043342 similar to gb:M95178 ALPHA-ACTININ 1, CYTOSKELETAL ISOFORM (HUMAN);
8669	15148	24915	5	0.0E+00	AI934954.1	EST_HUMAN	wp06g08.x1 NCL_CGAP_Kid12 Homo sapiens cDNA clone IMAGE:2464094 3'
8670	18558	28842	7.41	0.0E+00	AW327895.1	EST_HUMAN	4r02b08.x1 NIH_MGC_3 Homo sapiens cDNA clone IMAGE:2846919 5'
8700	18518	28800	4.73	0.0E+00	BE185656.1	EST_HUMAN	IL5-HT0731-020500-077-05 HT0731 Homo sapiens cDNA
8712	18529	28812	4.74	0.0E+00	AL046540.1	EST_HUMAN	DKFZp434G178_r1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434G178 5'
8712	18529	28813	4.74	0.0E+00	AL046540.1	EST_HUMAN	DKFZp434G178_r1 434 (synonym: hies3) Homo sapiens cDNA clone DKFZp434G178 5'
8722	18539	28823	12.53	0.0E+00	AI923116.1	EST_HUMAN	wn83g03.x1 NCL_CGAP_U1 Homo sapiens cDNA clone IMAGE:2452468 3' similar to gb:S37431 LAMININ-RECEPTOR (HUMAN);
8724	18560	28863	4.18	0.0E+00	AA760913.1	EST_HUMAN	nz11c07.s1 NCL_CGAP_G0B1 Homo sapiens cDNA clone IMAGE:1287468 3' similar to TR:Q13686 Q13686 ALKB HOMOLOG PROTEIN.;
8724	18580	28864	4.18	0.0E+00	AA760913.1	EST_HUMAN	nz11c07.s1 NCL_CGAP_G0B1 Homo sapiens cDNA clone IMAGE:1287468 3' similar to TR:Q13686 Q13686 ALKB HOMOLOG PROTEIN.;
8728	18584	28869	2.33	0.0E+00	BE910546.1	EST_HUMAN	601501090F1 NIH_MGC_70 Homo sapiens cDNA clone IMAGE:3902926 5'
8737	17886	28130	5.67	0.0E+00	BE676347.1	EST_HUMAN	7127f12.x1 NCL_CGAP_G111 Homo sapiens cDNA clone IMAGE:3295919 3' similar to TR:O00409 O00409 CHECKPOINT SUPPRESSOR 1.;
8772	18589	28875	2.78	0.0E+00	L39891.1	NT	Homo sapiens polycystic kidney disease-associated protein (PKD1) gene, complete cds
8772	18589	28876	2.78	0.0E+00	L39891.1	NT	Homo sapiens polycystic kidney disease-associated protein (PKD1) gene, complete cds
8784	18599	28888	4.02	0.0E+00	AU138211.1	EST_HUMAN	AU138211 PLACE1 Homo sapiens cDNA clone PLACE1008077 5'
8797	18611	28902	1.91	0.0E+00	BE622317.1	EST_HUMAN	601447096F1 NIH_MGC_72 Homo sapiens cDNA clone IMAGE:3916270 5'
8827	18640	28924	10.47	0.0E+00	BE748899.1	EST_HUMAN	601572186T1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:3839012 3'
8827	18640	28925	10.47	0.0E+00	BE748899.1	EST_HUMAN	601572186T1 NIH_MGC_55 Homo sapiens cDNA clone IMAGE:3839012 3'
8837	18650	28937	2.97	0.0E+00	AU141882.1	EST_HUMAN	AU141882 THYROT1 Homo sapiens cDNA clone THYROT1001398 5'
8837	18650	28938	2.97	0.0E+00	AU141882.1	EST_HUMAN	AU141882 THYROT1 Homo sapiens cDNA clone THYROT1001398 5'
8840	18653	28941	2.35	0.0E+00	AW006022.1	EST_HUMAN	wz91h01.x1 NCL_CGAP_Bm25 Homo sapiens cDNA clone IMAGE:2566225 3' similar to WP:F53H10.2 OE11040 ZINC FINGER, C2H2 TYPE.;
8843	19474	28943	3.84	0.0E+00	BF002333.1	EST_HUMAN	7h22b10.x1 NCL_CGAP_Co16 Homo sapiens cDNA clone IMAGE:3316699 3' similar to TR:Q13458 Q13458 TRIO.;
8861	18673	28952	3.19	0.0E+00	AW387776.1	EST_HUMAN	MR4-ST0118-261099-012-b03 ST0118 Homo sapiens cDNA
8861	18673	28953	3.19	0.0E+00	AW387776.1	EST_HUMAN	MR4-ST0118-261099-012-b03 ST0118 Homo sapiens cDNA
8878	18690	28982	2.57	0.0E+00	11435244	NT	Homo sapiens KIAA0247 gene product (KIAA0247), mRNA

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Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8878	18690	28983	2.57	0.0E+00	11435244	NT	Homo sapiens KIAA0247 gene product (KIAA0247), mRNA
8883	18694	28987	5.52	0.0E+00	U36253.1	NT	Human beta-prime-adaptin (BAM22) gene, exon 5
8885	18696	28989	2.04	0.0E+00	BE379254.1	EST_HUMAN	601237691F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3609623 5'
8885	18696	28990	2.04	0.0E+00	BE379254.1	EST_HUMAN	601237691F1 NIH_MGC_44 Homo sapiens cDNA clone IMAGE:3609623 5'
8896	16272	26434	63.21	0.0E+00	AA211663.1	EST_HUMAN	zn5602.r1 Striatogene muscle 937209 Homo sapiens cDNA clone IMAGE:562203 5' similar to gb.X03740 MYOSIN HEAVY CHAIN, SKELETAL MUSCLE (HUMAN);
8900	15983	26006	4.08	0.0E+00	AW505430.1	EST_HUMAN	UH-HF-BNO-ama-c-01-0-UI.r1 NIH_MGC_50 Homo sapiens cDNA clone IMAGE:3081217 5'
8902	18710	29005	3.25	0.0E+00	BE794758.1	EST_HUMAN	601590588F1 NIH_MGC_7 Homo sapiens cDNA clone IMAGE:3944708 5'
8903	18711	29006	37.53	0.0E+00	BE879633.1	EST_HUMAN	601491821F1 NIH_MGC_69 Homo sapiens cDNA clone IMAGE:3894220 5'
8904	18712	29007	2.93	0.0E+00	M50676.1	NT	Human von Willebrand factor pseudogene corresponding to exons 23 through 34
8915	18723	29014	6.35	0.0E+00	BE409993.1	EST_HUMAN	601299403F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3629644 5'
8916	18724	29015	1.93	0.0E+00	11427345	NT	Homo sapiens protein kinase, AMP-activated, alpha 2 catalytic subunit (PRKAA2), mRNA
8916	18724	29016	1.93	0.0E+00	11427345	NT	Homo sapiens protein kinase, AMP-activated, alpha 2 catalytic subunit (PRKAA2), mRNA
8916	18724	29017	1.93	0.0E+00	11427345	NT	Homo sapiens protein kinase, AMP-activated, alpha 2 catalytic subunit (PRKAA2), mRNA
8917	18725	29018	2.32	0.0E+00	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
8917	18725	29019	2.32	0.0E+00	AF223391.1	NT	Homo sapiens calcium channel alpha1E subunit (CACNA1E) gene, exons 7-49, and partial cds, alternatively spliced
8919	18727	29020	5.66	0.0E+00	BF681641.1	EST_HUMAN	602155722F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4296725 5'
8919	18727	29021	5.66	0.0E+00	BF681641.1	EST_HUMAN	602155722F1 NIH_MGC_83 Homo sapiens cDNA clone IMAGE:4296725 5'
8924	18732	29026	3.22	0.0E+00	BE903372.1	EST_HUMAN	601676357F1 NIH_MGC_21 Homo sapiens cDNA clone IMAGE:3858835 5'
8933	18741	29034	6.15	0.0E+00	BF312552.1	EST_HUMAN	601897524F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4127069 5'
8933	18741	29035	6.15	0.0E+00	BF312552.1	EST_HUMAN	601897524F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:4127069 5'
8934	18742	29036	3.02	0.0E+00	X51755.1	NT	Human lambda-immunoglobulin constant region complex (germline)
8934	18742	29037	3.02	0.0E+00	X51755.1	NT	Human lambda-immunoglobulin constant region complex (germline)
8964	18475		20.36	0.0E+00	BF309120.1	EST_HUMAN	601890534F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:4131416 5'
8965	18771	29062	1.98	0.0E+00	BE688861.1	EST_HUMAN	RC4-NN0025-120600-016-b07 NN0025 Homo sapiens cDNA
8965	18771	29063	1.98	0.0E+00	BE688861.1	EST_HUMAN	RC4-NN0025-120600-016-b07 NN0025 Homo sapiens cDNA
8969	18775	29066	31.56	0.0E+00	BE287175.1	EST_HUMAN	601177407F1 NIH_MGC_17 Homo sapiens cDNA clone IMAGE:3832968 5'
8981	18786	29076	36.47	0.0E+00	7669505	NT	Homo sapiens myosin, heavy polypeptide 1, skeletal muscle, adult (MYH1), mRNA
8981	18786	29077	36.47	0.0E+00	7669505	NT	Homo sapiens myosin, heavy polypeptide 1, skeletal muscle, adult (MYH1), mRNA
8982	18787	29078	34.29	0.0E+00	11024711	NT	Homo sapiens myosin, heavy polypeptide 4, skeletal muscle (MYH4), mRNA
8987	18792	29081	31.52	0.0E+00	F00884.1	EST_HUMAN	HSB77E122 STRATAGENE Human skeletal muscle cDNA library, cat. #936215. Homo sapiens cDNA clone 77E12

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Table 4
Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
8987	18792	29082	31.52	0.0E+00	F00884.1	EST_HUMAN	HSB77E122 STRATAGENE Human skeletal muscle cDNA library, cat. #938215. Homo sapiens cDNA clone 77E12
9000	18803	29096	7.35	0.0E+00	U94744.1	NT	Human Chediak-Higashi syndrome protein short isoform (LYST) mRNA, complete cds
9002	18805	29098	92.9	0.0E+00	Z20856.1	NT	Homo sapiens of cardiac alpha-myosin heavy chain gene
9017	19747	24893	2.54	0.0E+00	BE312542.1	EST_HUMAN	601150023F1 NIH_MGC_19 Homo sapiens cDNA clone IMAGE:3503020 5'
9031	19594		2.67	0.0E+00	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
9033	19605		3.43	0.0E+00	A190993.1	EST_HUMAN	qel7b12.x1 Soares fetal lung NBHL19W Homo sapiens cDNA clone IMAGE:1739231 3'
9043	18829		2.24	0.0E+00	AB011399.1	NT	Homo sapiens gene for AF-6, complete cds
9062	18843		2.2	0.0E+00	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
9071	18849		2.73	0.0E+00		NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
9090	18864		5.48	0.0E+00	5802973	NT	Homo sapiens antioxidant protein 1 (AOP1), nuclear gene encoding mitochondrial protein, mRNA
9123	19563	25066	1.63	0.0E+00	AF240786.1	NT	Homo sapiens glutathione S-transferase theta 2 (GSTT2) and glutathione S-transferase theta 1 (GSTT1) genes, complete cds
9133	19571		2.82	0.0E+00	AL041931.1	EST_HUMAN	DKFZp434K0819_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434K0819 5'
9158	19711		3.07	0.0E+00	11418318	NT	Homo sapiens G-2 and S-phase expressed 1 (GTSET1), mRNA
9167	18910		4.39	0.0E+00	AL046544.1	EST_HUMAN	DKFZp434G218_r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434G218 5'
9180	19610		2.36	0.0E+00	A1903497.1	EST_HUMAN	IL-BT030-271098-001 BT030 Homo sapiens cDNA
9218	19732		1.3	0.0E+00	N54484.1	EST_HUMAN	yv40e08.s1 Soares fetal liver spleen 1NFLS Homo sapiens cDNA clone IMAGE:245222 3' similar to SW:POL_BAEVM P10272 POL POLYPROTEIN ;
9233	18952		3.36	0.0E+00	AF106656.1	NT	Homo sapiens adenylsuccinate lyase gene, complete cds
9236	10752	20601	3.21	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
9236	10752	20602	3.21	0.0E+00	4507500	NT	Homo sapiens T-cell lymphoma invasion and metastasis 1 (TIAM1) mRNA
9246	19612		2.75	0.0E+00	10092587	NT	Homo sapiens nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 2 (NFATC2), mRNA
9276	10477		2.7	0.0E+00	AF003528.1	NT	Homo sapiens X-linked anhidrotic ectodermal dysplasia protein gene (EDA), exon 2 and flanking repeat regions
9309	19412	25183	2.48	0.0E+00	11430480	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
9370	19544	25064	3.23	0.0E+00	AW590082.1	EST_HUMAN	hg31e06.x1 NCL_CGAP_GC6 Homo sapiens cDNA clone IMAGE:2947234 3' similar to contains Alu repetitive element; contains element MER22 repetitive element ;
9382	19595		1.61	0.0E+00	BE090210.1	EST_HUMAN	RC6-BT0711-290300-011-D05 BT0711 Homo sapiens cDNA
9426	19607		2.33	0.0E+00	AF068757.1	NT	Homo sapiens somatostatin receptor subtype 3 (SS1R3) gene, 5' flanking region and partial cds
9461	19092		1.56	0.0E+00	9635487	NT	Human endogenous retrovirus, complete genome
9498	19600		1.59	0.0E+00	AI204914.1	EST_HUMAN	an05h04.x1 Stratagene schizo brain S11 Homo sapiens cDNA clone IMAGE:1684759 3'
9529	19136		1.58	0.0E+00	AI904646.1	EST_HUMAN	QIV-BT065-020399-103 BT065 Homo sapiens cDNA

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Table 4

Single Exon Probes Expressed in Heart

Probe SEQ ID NO:	Exon SEQ ID NO:	ORF SEQ ID NO:	Expression Signal	Most Similar (Top) Hit BLAST E Value	Top Hit Accession No.	Top Hit Database Source	Top Hit Descriptor
9540	19596		1.68	0.0E+00	BE439792.1	EST_HUMAN	HTM1-654F HTM1 Homo sapiens cDNA
9551	11841	21724	1.98	0.0E+00	6912457	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
9551	11841	21725	1.98	0.0E+00	6912457	NT	Homo sapiens calcineurin binding protein 1 (KIAA0330), mRNA
9571	19161	25267	2.33	0.0E+00	AF036365.1	NT	Homo sapiens cavedin-3 (CAV3) mRNA, complete cds
9584	11561	21426	2.87	0.0E+00	H30132.1	EST_HUMAN	y059e08.r1 Scores breast 3NdbHst Homo sapiens cDNA clone IMAGE:182246 5' similar to gb:M64099 GAMMA-GLUTAMYLTRANSFERASE 5 PRECURSOR (HUMAN);
9584	11561	21427	2.87	0.0E+00	H30132.1	EST_HUMAN	y059e08.r1 Scores breast 3NdbHst Homo sapiens cDNA clone IMAGE:182246 5' similar to gb:M64099 GAMMA-GLUTAMYLTRANSFERASE 5 PRECURSOR (HUMAN);
9697	19179		32.21	0.0E+00	D50859.1	NT	Human gamma-cytoplasmic actin (ACTGP9) pseudogene
9599	19181	25244	3.99	0.0E+00	11418189	NT	Homo sapiens thyroid autoantigen 70kD (Ku antigen) (G22P1), mRNA
9599	19181	25245	3.99	0.0E+00	11418189	NT	Homo sapiens thyroid autoantigen 70kD (Ku antigen) (G22P1), mRNA
9685	19239	25214	5.21	0.0E+00	BE246780.1	EST_HUMAN	TCBAP1E4466 Pediatric pre-B cell acute lymphoblastic leukemia Baylor-HGSC project=TCBA Homo sapiens cDNA clone TCBAP4466
9692	15089	24829	1.64	0.0E+00	8922593	NT	Homo sapiens hypothetical protein FLJ10697 (FLJ10697), mRNA
9698	19249		2.39	0.0E+00	11526291	NT	Homo sapiens hypothetical protein FLJ20454 (FLJ20454), mRNA
9721	15092	24896	3.19	0.0E+00	4885312	NT	Homo sapiens G protein-coupled receptor 24 (GPR24), mRNA
9734	19269		2.21	0.0E+00	AB029900.1	NT	Homo sapiens CST gene for cerebroside sulfotransferase, exon 1, 2, 3, 4, 5
9773	19291	25233	1.5	0.0E+00	9559724	NT	Homo sapiens cleavage and polyadenylation specific factor 1, 160kD subunit (CPSF1), mRNA
9794	19757		2.79	0.0E+00	AL163246.2	NT	Homo sapiens chromosome 21 segment HS21C046
9800	10546	20354	1.41	0.0E+00	6806918	NT	Homo sapiens low density lipoprotein-related protein 2 (LRP2), mRNA
9878	19364		2.13	0.0E+00	7657020	NT	Homo sapiens DKFZp434P211 protein (DKFZp434P211), mRNA
9913	19388	25177	2.42	0.0E+00	8567387	NT	Homo sapiens period (Drosophila) homolog 3 (PER3), mRNA
9938	19407		1.51	0.0E+00	X57147.1	NT	Human endogenous retrovirus pHE.1 (ERVg)
9946	19921		1.29	0.0E+00	11434874	NT	Homo sapiens oxytocin receptor (OXTR), mRNA
9966	19591		1.56	0.0E+00	BE177449.1	EST_HUMAN	RC1-HT0595-200400-012-f12 HT0595 Homo sapiens cDNA
9971	19431		1.28	0.0E+00	AL049911.1	EST_HUMAN	DKFZp434J0618 r1 434 (synonym: htes3) Homo sapiens cDNA clone DKFZp434J0618

CLAIMS

1. A spatially-addressable set of single exon nucleic-acid probes for measuring gene expression in a sample derived
5 from human heart comprising a plurality single exon nucleic probes, said probes comprising any one of the nucleotide sequences set out in SEQ ID NOs: 1 - 9,980 or a complementary sequence, or a portion of such a sequence.
- 10 2. A spatially-addressable set of single exon nucleic acid probes as claimed in claim 1 wherein each of said plurality of probes is separately and addressably amplifiable.
3. A spatially-addressable set of single exon nucleic acid
15 probes as claimed in claim 1 wherein each of said plurality of probes is separately and addressably isolatable from said plurality.
4. A spatially-addressable set of single exon nucleic acid
20 probes as claimed in any of claims 1 to 3 wherein said probes comprise any one of the nucleotide sequences set out in SEQ ID NOS.: 9,981 - 19,771.
5. A spatially-addressable set of single exon nucleic acid
25 probes as claimed in any of claims 1 to 4, wherein each of said plurality of probes is amplifiable using at least one common primer.
6. A spatially-addressable set of single exon nucleic acid
30 probes as claimed in any of claims 1 to 5 wherein the set comprises between 50 - 20,000 single exon nucleic acid probes.
7. A spatially-addressable set of single exon nucleic acid
35 probes as claimed in any of claims 1 to 6, wherein the

average length of the single exon nucleic acid probes is between 200 and 500 bp.

8. A spatially-addressable set of single exon nucleic acid probes as claimed in any of claims 1 to 7, wherein at least 50% of said single exon nucleic acid probes lack prokaryotic and bacteriophage vector sequence.

9. A spatially-addressable set of single exon nucleic acid probes as claimed in any of claims 1 to 8, wherein at least 50% of said single exon nucleic acid probes lack homopolymeric stretches of A or T.

10. A spatially-addressable set of single exon nucleic acid probes as claimed in any of claims 1 - 9 characterised in that said set of probes is addressably disposed upon a substrate.

11. A spatially-addressable set of single exon nucleic acid probes as claimed in claim 10 wherein said substrate is selected from glass, amorphous silicon, crystalline silicon and plastic.

12. A microarray comprising a spatially addressable set of single exon nucleic acid probes as claimed in any of claims 1 - 11.

13. A single exon nucleic acid probe for measuring human gene expression in a sample derived from human heart comprising a nucleotide sequence as set out in any of SEQ ID NOs.: 1 - 9,980 or a complementary sequence or a fragment thereof wherein said probe hybridizes at high stringency to a nucleic acid molecule expressed in the human heart.

35

14. A single exon nucleic acid probe as claimed in claim 13 comprising a nucleotide sequence as set out in any of SEQ ID NOs.: 9,981 - 19,771 or a complementary sequence or a fragment thereof.

5

15. A single exon nucleic acid probe for measuring human gene expression in a sample derived from human heart which is a nucleic acid molecule having a sequence encoding a peptide comprising a peptide sequence as set out in any of
10 SEQ ID NOs.: 19,772 - 29,119, or a complementary sequence or a fragment thereof wherein said probe hybridizes at high stringency to a nucleic acid expressed in the human heart.

16. A single exon nucleic acid probe as claimed in any one
15 of claims 13 to 15 wherein said single exon nucleic acid probe comprises between 15 and 25 contiguous nucleotides of said SEQ ID NO.

17. A single exon nucleic acid probe as claimed in any one
20 of claims 13 to 15, wherein said probe is between 3 - 25 kb in length.

18. A single exon nucleic acid probe as claimed in any one of claims 13 - 17, wherein said probe is DNA, RNA or PNA.

25

19. A single exon nucleic acid probe as claimed in any one of claims 13 - 18, wherein said probe is detectably labeled.

30 20. A single exon nucleic acid probe as claimed in any one of claims 13 - 19, wherein said probe lacks prokaryotic and bacteriophage vector sequence.

21. A single exon nucleic acid probe as claimed in any one
35 of claims 13 - 20, wherein said probe lacks homopolymeric

stretches of A or T.

22. A method of measuring gene expression in a sample derived from human heart, comprising:

5 contacting the microarray of claim 12, with a first
 collection of detectably labeled nucleic acids,
 said first collection of nucleic acids derived
 from mRNA of human heart; and then
 measuring the label detectably bound to each probe of
10 said microarray.

23. A method of identifying exons in a eukaryotic genome, comprising:

 algorithmically predicting at least one exon from
15 genomic sequence of said eukaryote; and then
 detecting specific hybridization of detectably labeled
 nucleic acids to a single exon probe,
 wherein said detectably labeled nucleic acids are derived
 from mRNA from the heart of said eukaryote, said probe is a
20 single exon probe having a fragment identical in sequence
 to, or complementary in sequence to, said predicted exon,
 said probe is included within a microarray according to
 claim 12, and said fragment is selectively hybridizable at
 high stringency.

25

24. A method of assigning exons to a single gene, comprising:

 identifying a plurality of exons from genomic
 sequence according to the method of claim 23; and
30 then
 measuring the expression of each of said exons in a
 plurality of tissues and/or cell types using
 hybridization to single exon microarrays having a
 probe with said exon,
35 wherein a common pattern of expression of said exons in

said plurality of tissues and/or cell types indicates that the exons should be assigned to a single gene.

25. A nucleic acid sequence as set out in any of SEQ ID
5 NOs: 1 - 19,771 which encodes a peptide.

26. A peptide encoded by a sequence as set out in any of
SEQ ID Nos: 1 - 19,771.

10 27. A peptide comprising a sequence as set out in any of
SEQ ID Nos: 19,772 - 29,119.

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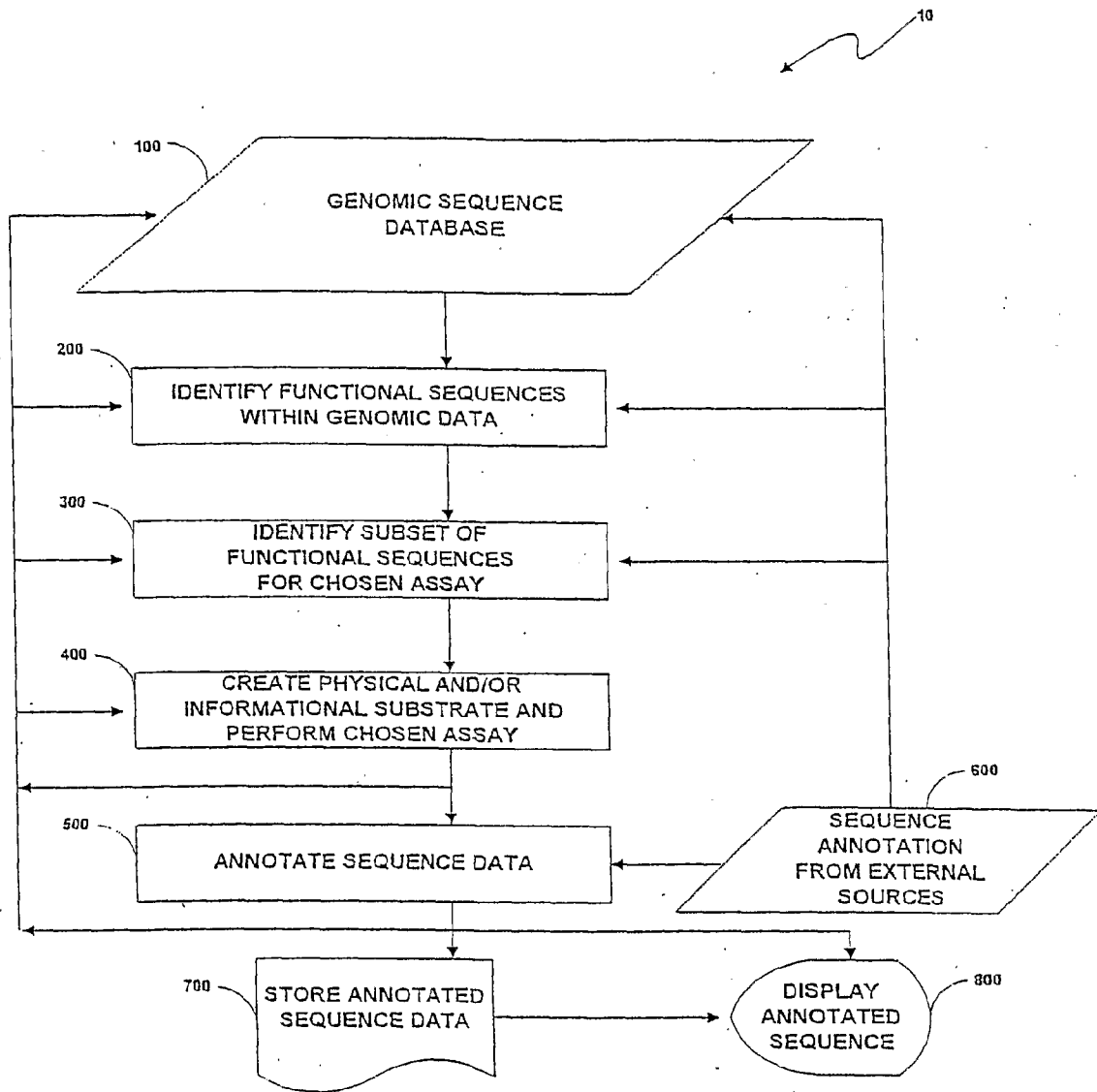


Fig. 1

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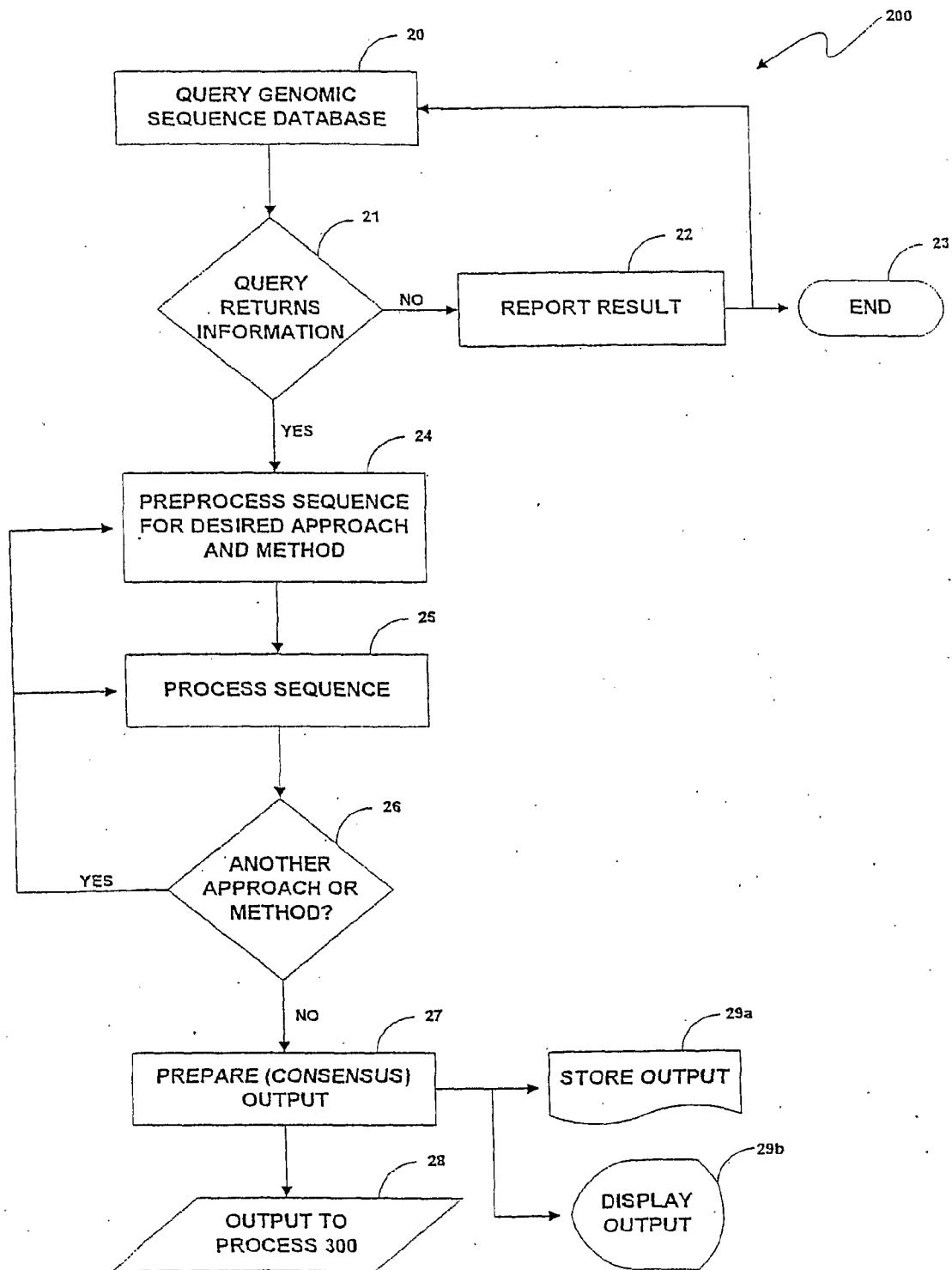


Fig. 2

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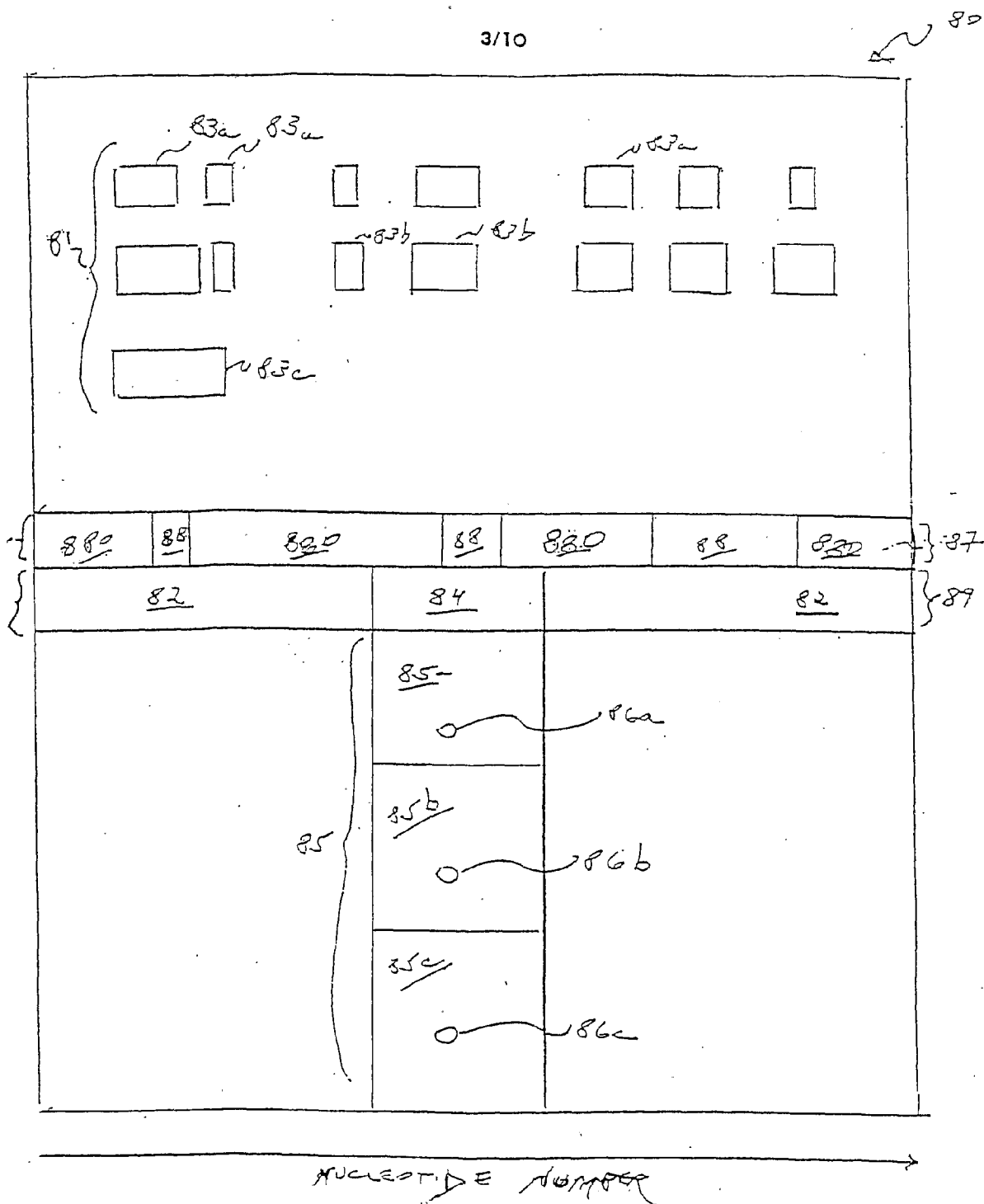


Fig. 3

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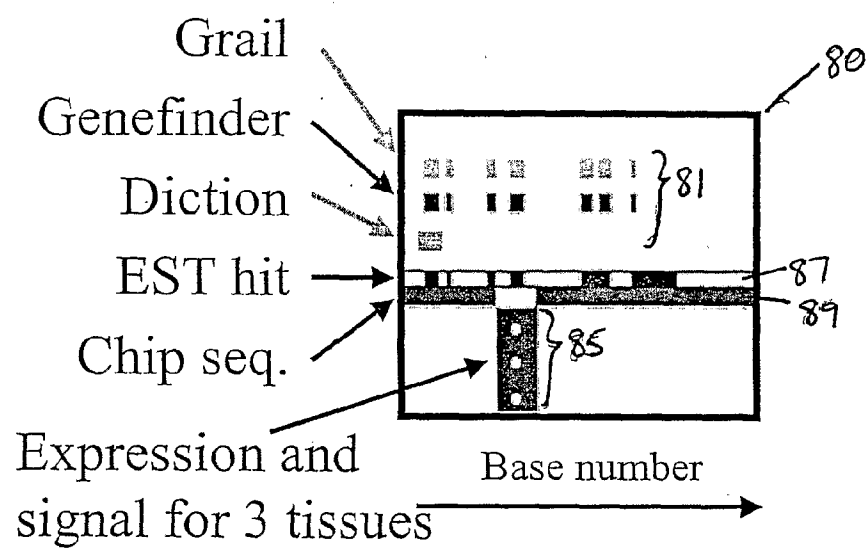


Fig. 4

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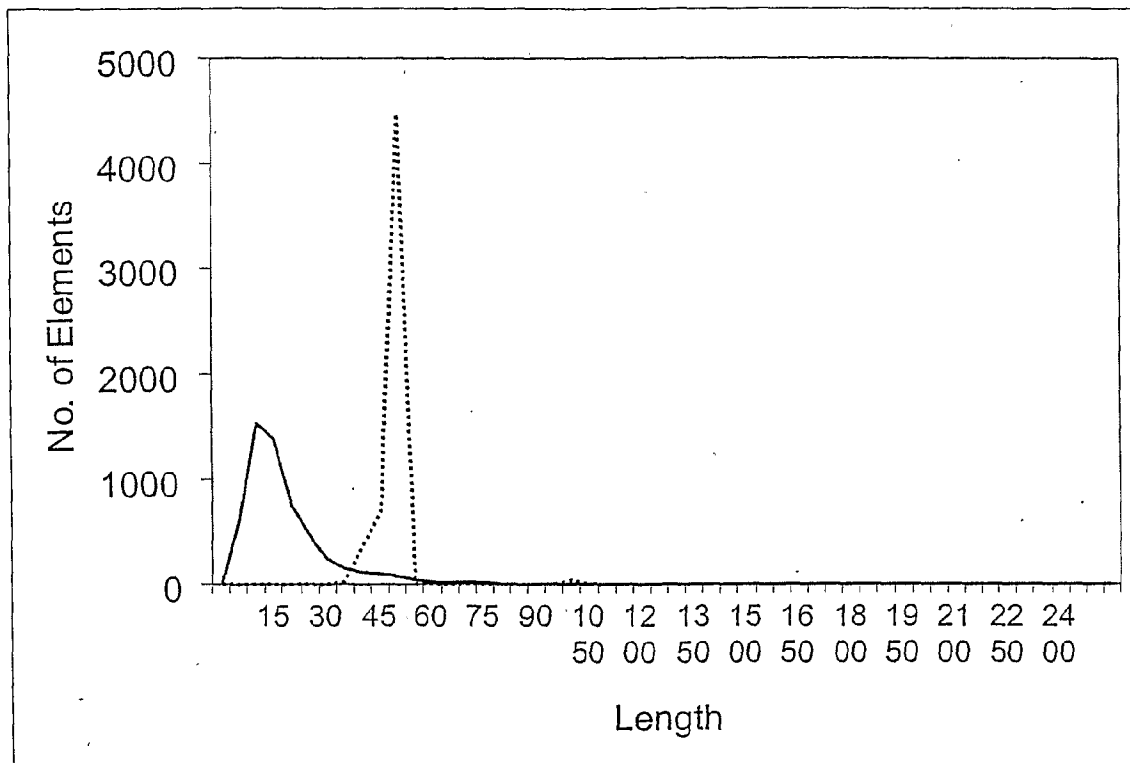


Fig. 5

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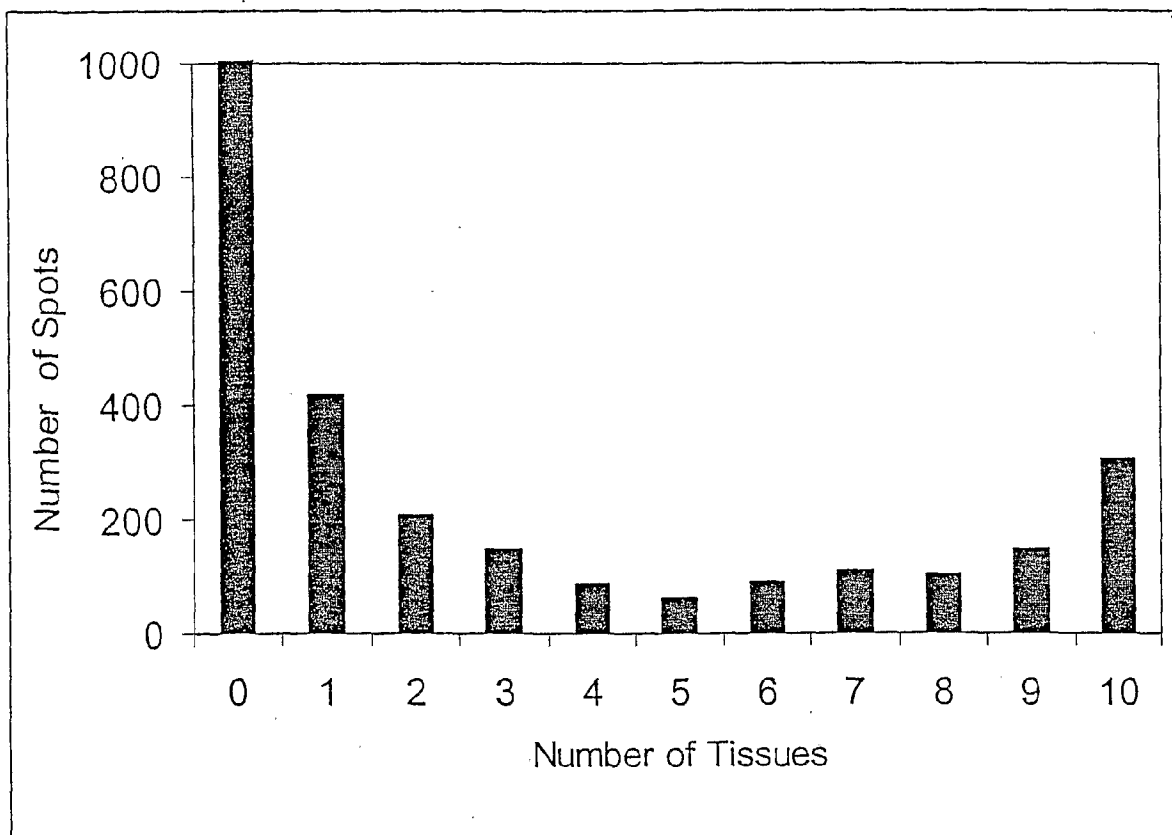


Fig. 6

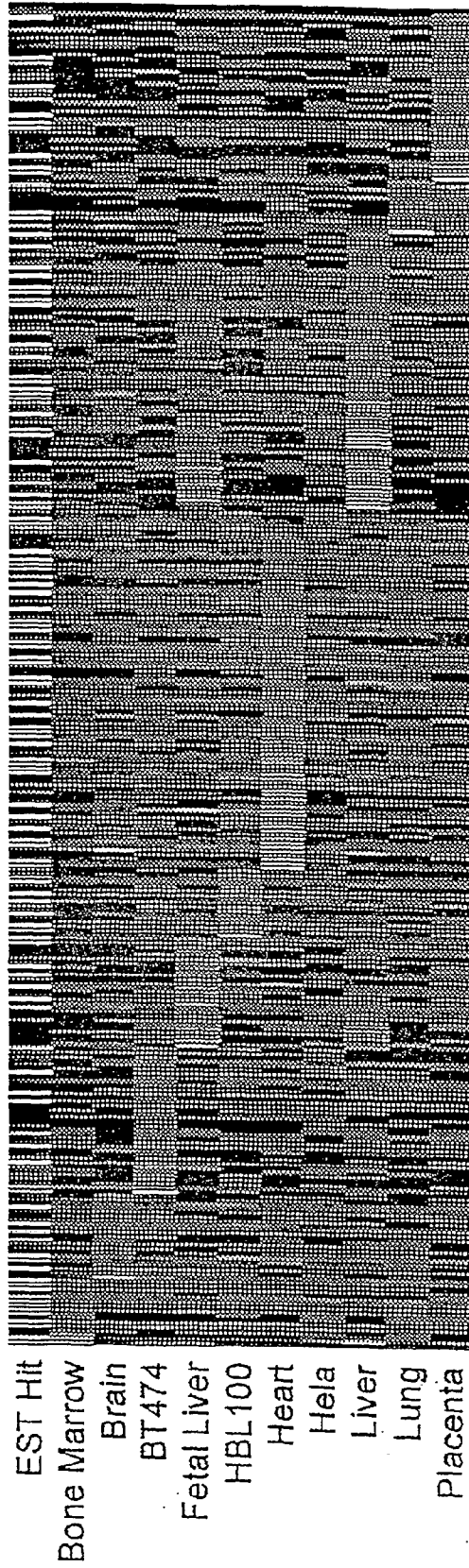


Fig. 7a

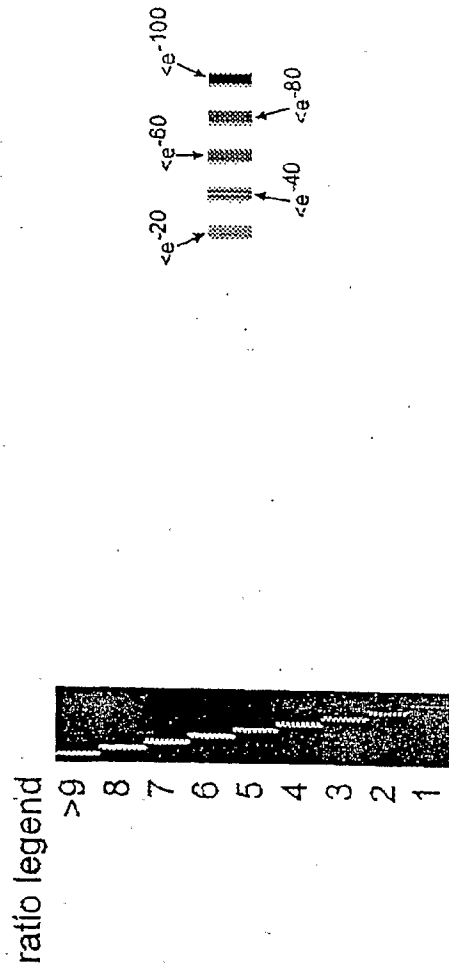


Fig. 7b

Fig. 7c

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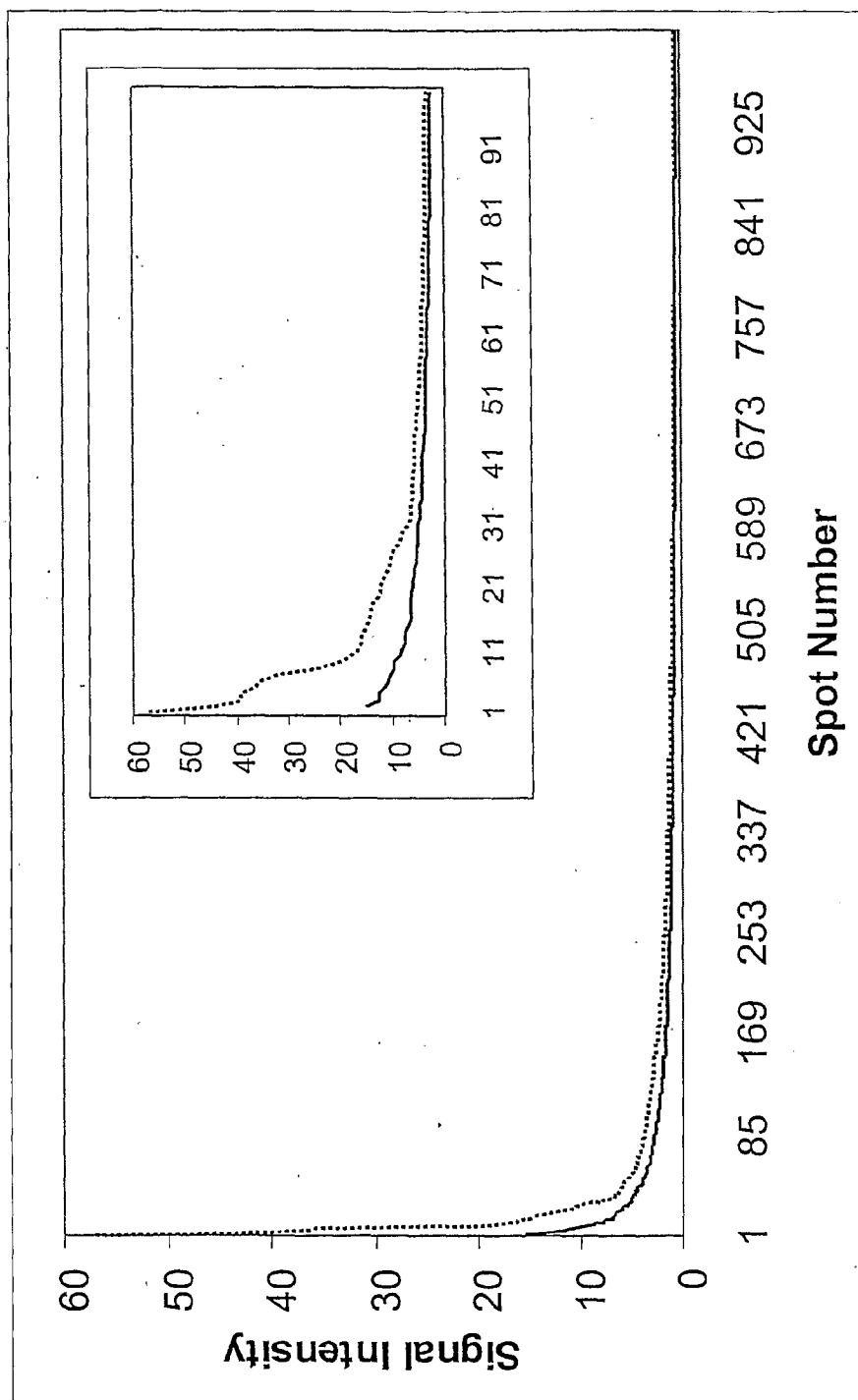


Fig. 8

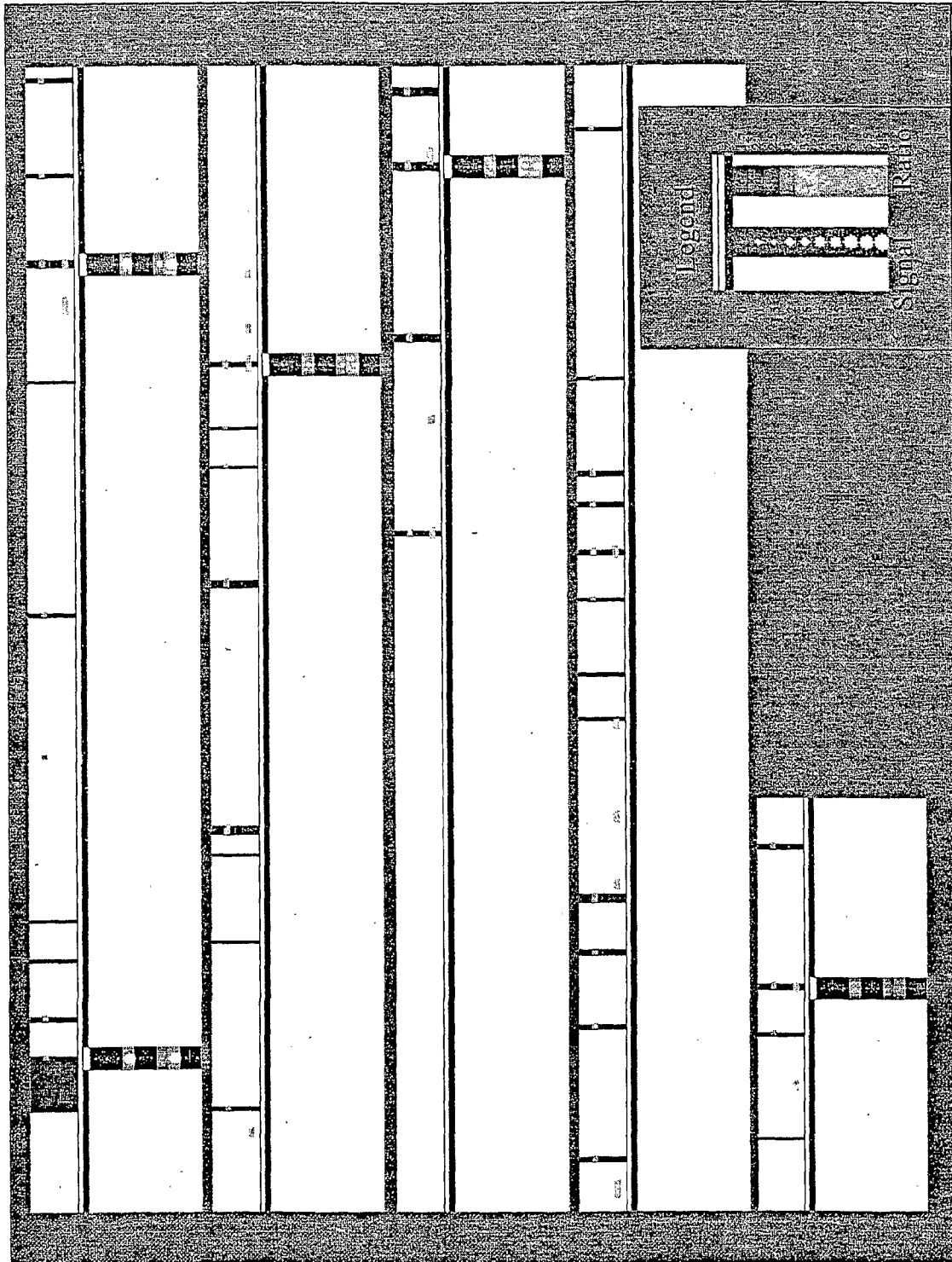


Fig. 9

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Fig. 10

